PROCEEDINGS

OF

THE BRITISH ACADEMY

1905–1906

London
Published for the British Academy
By Henry Frowde, Oxford University Press
Amen Corner

The papers contained in this volume are issued in separate form, and can be had from the Publisher, Mr. Henry Frowde, Amen Corner, London, E.C.

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Professor JOHN RHYS.
[2]Professor W. RIDGEWAY.
[1]The Very Rev J. ARMITAGE ROBINSON, D D
The Rt Hon. the Earl of ROSEBERY, K G, K.T
The Rev Professor WILLIAM SANDAY, D D.
The Rev Professor W W. SKEAT.
[3]Professor W. R. SORLEY
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[1]Professor G. F. STOUT
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Sir E. MAUNDE THOMPSON, K.C B
The Rev H. F. TOZER.
[2]The Rt Hon Sir G O. TREVELYAN, Bart.
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[2]Sir SPENCER WALPOLE, K.C.B.
Dr A W. WARD.
Professor JAMES WARD.
[4]Dr G. F. WARNER
[3]The Rt Rev JOHN WORDSWORTH, D.D.
[2]Professor JOSEPH WRIGHT.

[1] Elected 1903. [2] Elected 1904. [3] Elected 1905. [4] Elected 1906.

CORRESPONDING FELLOWS

Elected 1904

Count UGO BALZANI (Reale Accademia dei Lincei, Rome).

Professor H DIELS (Secretary, Royal Prussian Academy, Berlin)

M le Comte de FRANQUEVILLE (Membre de l'Institut, Académie des Sciences Morales et Politiques, Paris).

Professor M J. de GOEJE (Royal Academy of Sciences, Amsterdam)

Professor I GOLDZIHER (Hungarian Academy, Budapest).

Professor T GOMPERZ (Imperial Academy of Sciences, Vienna).

Professor J. L HEIBERG (Royal Danish Academy, Copenhagen).

Professor K KRUMBACHER (Royal Bavarian Academy of Sciences, Munich)

Professor F LEO (Secretary, Royal Academy of Sciences, Gottingen).

M. PAUL MEYER (Membre de l'Institut; Académie des Inscriptions et Belles-Lettres, Paris)

M. GEORGES PERROT (Membre de l'Institut, Academie des Inscriptions et Belles-Lettres, Paris).

M. GEORGES PICOT (Membre de l'Institut, Sec. Per., Académie des Sciences Morales et Politiques)

Professor C H. SALEMANN (Imperial Academy of Sciences, St. Petersburg).

DECEASED FELLOWS

Professor E. B COWELL.

Sir R. C JEBB, O.M.

Right Hon W. E H. LECKY, O.M.

Rev. Provost GEORGE SALMON

Professor F. W. MAITLAND.

Mr. D. B MONRO.

[1] Dr. A. S. MURRAY.

Sir LESLIE STEPHEN.

[1] Elected 1903.

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SECRETARY

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SIR SPENCER WALPOLE, K.C.B.

SECRETARY:

PROFESSOR I. GOLLANCZ.

THIRD ANNUAL GENERAL MEETING

July 5, 1905

ADDRESS BY THE PRESIDENT, LORD REAY

WHEN last year I had the pleasure of addressing you, the Academy had but recently taken its place as a constituent Academy in connexion with the important meeting in London of the International Association. The report of the Section of Letters to which I then referred has since been published, and will be found in the first volume of *The Proceedings of the Academy*, a specimen copy of which is on the table before me. I am glad to be able to report that two at least of the projects there referred to have been making progress during the past year. The Greek Thesaurus is receiving the careful attention of the International Committee. Professor Kretschmar, who holds the Chair of Comparative Philology in the University of Vienna, has been co-opted a member of the International Committee, and is prepared to draw up a Memorandum on the project of a Greek Thesaurus, and his view and that of Professor Krumbacher is that a periodical should be established for the purpose. In the absence of funds all that is possible at present is to take a preparatory survey of the subject and to consider the lines on which the undertaking might be organized, and various preliminary proposals are being considered *The Encyclopaedia of Islam* is making steady advance, and it is with special gratitude that we acknowledge the promised grant from the Government of India, through the Secretary of State, of a sum not exceeding £200 a year for ten years towards the work, under conditions which have been carefully considered by the International Committee, and accepted by them with due thanks.

As regards the internal work of the Academy, important papers have been read. Without referring to all these papers, I may perhaps be permitted to single out Sir Frederick Pollock's and Professor Campbell Fraser's papers commemorative of the centenary of John Locke, Sir Courtenay Ilbert's lucid paper on the centenary of the French Civil Code, Professor Holland's exceedingly important contribution to International Law, which is now circulating in French throughout the Continent, with special reference to international

problems. To these papers by Fellows of the Academy must be added Mr. Fitz-Maurice Kelly's scholarly address on the tercentenary of the first publication of *Don Quixote*, a paper that has received the highest commendation on the part of Spanish scholars, and has brought the Academy the most cordial thanks from leading members of the Spanish Academy. It is gratifying to know that Mr. Fitz-Maurice Kelly represented the Government of his country at the recent celebration at Madrid, and has received the medal struck to commemorate the event; he has also been nominated a Knight Commander of the Order of Alfonso XII. These, and the other papers read, represent but a small part of the activity of the Fellows of the Academy. Our best thanks are due to our energetic secretary, Professor Gollancz, for the care he has bestowed on the publication of our *Proceedings*. They will convince our sister Academies and the public that we have not been idle, and that many important subjects have been brought to our notice by experts. It must be borne in mind, however, that the Academy is still in its very early youth, and its real strength cannot be put forth until it is adequately provided with the necessary funds for carrying out its programme of work. Meanwhile, both at home and abroad, it has been striving to the best of its ability to work in the spirit of the charter under which it was incorporated. I am glad to say that on this occasion I have not to refer to any void left in our midst by death during the past twelve months. It is my most pleasant duty to recall various high distinctions conferred upon members of our body, notably Dr. James's promotion to the Provostship of King's College, Cambridge, the election of Dr. Murray as a corresponding member of the Imperial Academy of Vienna, and especially the well-merited inclusion of Sir Richard Jebb in the Order of Merit, in which he is so worthily to represent the studies fostered by this Academy. In the name of all I offer him our sincerest congratulations; may he enjoy the honour for long years to come. It can never be forgotten how great has been his service in the early days of the foundation of the British Academy, and the distinction not only adds lustre to us in our corporate capacity, but indicates that the cause of literary scholarship and culture is not yet a forlorn one in spite of ominous warnings.

One of our most eminent scientists has recently, in a powerful lecture, put forward claims which this Academy must oppose. Let me say at once that I am not going to retaliate by underrating the importance of the knowledge of Nature.

I am fully alive to the debt we owe to Nature's investigators. I wish even to point out that the author of that discourse might

have strengthened his case by alluding to the penalty paid by the great agricultural interest for the neglect of scientific research.

I willingly admit that in the administration of public affairs the teaching of science must be taken into account, and that those who enrich us with the discoveries of the forces of Nature are benefactors of mankind.

But I am not prepared to admit that we must give 'a complete supremacy to the study of Nature,' and that 'the study of ancient elegance and historic wisdom' should become a luxury.

This Academy will certainly not be prepared 'to see the classical and historical scheme of education entirely abandoned, and its place taken by a scheme of education in the knowledge of Nature.' If there were no limits to the brain-power of individuals we could enforce nature-study, but even the author of the discourse points out that there are 'limitations to the mind of man,' and that experimental psychology is only in its infancy. A proper distribution of intellectual labour is what we have to aim at.

The relation of man to Nature does not render superfluous an examination of the relation of man to his Creator, to his neighbours, and to spiritual influences. The relation of the Highland crofter to Nature is, no doubt, worth investigating, but it does not preclude the necessity of considering his relation to his Church; and no one can understand Scotland who has not followed the vicissitudes of its ecclesiastical history. A statesman who attempted to rule Scotland without such knowledge would sooner or later come to grief, and what applies to Scotland applies to other countries.

We do not claim a monopoly for Latin and Greek, but we believe that a mastery of Greek and Latin literature, and not 'a knowledge, however imperfect,' will, in and out of Parliament, improve debate and discourage rhetoric—the pitfall of statesmen.

We do not consider that our statesmen, our divines, our lawyers, our economists are wasting time if they master philosophical problems. The 'complete supremacy of the study of Nature' in our universities would be as great a calamity as the complete supremacy of any other branch of learning. I do not overlook the fact that the advocate of a 'great and leading position for the knowledge of Nature' does not wish to 'remove the acquirement of the use of languages, the training in the knowledge and perception of beauty in literary art, and the feeding of the mind with the great stories of the past, from a high and necessary position in education.'

But when they are classed as 'entertainments,' whereas to us they are quite as essential as the knowledge of Nature, it is the prime duty

of such a body as ours to assert the claims of the studies we represent.

It will be an evil day for our civilization if we give encouragement to the notion that the only useful servants of the public are those who live absorbed in the study of Nature, and if public opinion comes to look upon men in other fields as merely ornamental. This Academy will certainly not need any justification for its existence if it undertakes to combat this wild theory, and to demonstrate its fallacy. It is unscientific to assess the degree of usefulness of research in various directions. Take the work of our orientalists, which meets with such scant recognition. In so far as they increase our knowledge of the East, of its literature, of its religions, they make it more possible for us to avoid mistakes in ruling the East, which are due to a very superficial understanding of the character of our fellow subjects in India. Professor Browne, who represents this Academy on the *Encyclopaedia of Islam*, seems to me to be engaged in work quite as useful as the scientist in the United States whose investigations lead him to think that a meal should not be converted into a social function.

An empire like ours has need of intellectual activity in such a great variety of directions that it would be folly to differentiate.

We are told that—

> Where there is one man of first-rate intelligence employed in detecting the disease-producing parasites, their special conditions of life, and the way to bring them to an end, there should be a thousand. It should be as much the purpose of civilized governments to protect their citizens in this respect as it is to provide defence against human aggression. Yet, it is the fact that this immensely important control of a great and constant danger and injury to mankind is left to the unorganized inquiries of a few enthusiasts. So little is this matter understood or appreciated, that those who are responsible for the welfare of States, with the rarest exceptions, do not even know that such protection is possible, and others again are so far from an intelligent view as to its importance, that they actually entertain the opinion that it would be a good thing were there more disease in order to get rid of the weakly surplus population!

Leon Say foresaw this development when he once described a future cabinet as composed mainly of hygienists, hygiene having become the dominant factor in a general election.

Among 'the rarest exceptions' the Government of India should be mentioned, as it has constantly invoked the aid of bacteriologists and has treated them liberally. India will have a Central Research Institute at Kasauli under Colonel Semple, M.D., where Indian officers may study the bacteriology and parasitology of tropical diseases, and a laboratory for scientific, medical, and sanitary work is to be established or enlarged at the headquarters of each of the provinces.

Hygiene is a recognized department of Indian administration, and in India, at all events, no time is spent on the emendation of a Greek text; but I am not prepared to say that when I visit the Pasteur Institute and admire the great benefits which accrue to mankind from its investigations, it ever occurred to me that Sir Richard Jebb ought to have consecrated his talents rather to the detection of disease-producing parasites than to the emendation of a Greek text, and to the interpretation of the spirit of that glorious civilization of Greece from which we moderns have so much to learn.

But this I am willing to admit, that when distinct evidence is forthcoming of fitness for nature-study every encouragement should be given to pursue it.

I am prepared to enter upon a crusade against waste in educational effort by a careful adaptation of methods of education to the variety of capacity in students.

What is of importance to mankind is that 'emendation of a Greek text and the exact degree of turpitude of the statesmen of a bygone age,' should be determined by scholars and historians *pari passu* with the detection of disease-producing parasites by nature-searchers, and the urgency of due recognition by the State of intellectual activity in all directions will not be contested by this Academy or by the Royal Society. As long as we indulge in a barren controversy, which department of research is of more immediate usefulness to our generation, we shall not obtain from the Government the means we require in order that we, as a nation, may contribute as we ought to the increase of knowledge. Such a controversy gives to the Government a pretext for abstention. A joint effort is required in order to overcome the lethargy of Philistinism. Whether the democracy 'will demand that those who carry on public affairs shall not be persons solely acquainted with the elegant fancies and stories of past ages, but shall be trained in the acquisition of natural knowledge, and keenly active in the skilful application of nature-control to the development of the well-being of the community,' seems to me doubtful.

The great danger we have to face is that the democracy will take the view that the complex and delicate mechanism required to rule an empire like ours does not involve training of a very varied description in which 'the skilful application of nature-control,' should have due influence, as well as the application of other sciences. I certainly cannot conceive statesmanship, or even the proper exercise of the rights of a citizen, without the knowledge of history. Can it be seriously maintained that the study of such events as the downfall of the Stuarts, and of the Bourbons, and of the Commune is merely

'a pleasant occupation,' because 'history does not repeat itself'. Foreign affairs can be managed without the knowledge of the laws of Nature, but not without the knowledge of history, because history does repeat itself, and explains the blunders which have been committed, and how they are to be avoided. A referendum to the leading statesmen of the present day of the proposition that 'as a matter of fact it cannot be shown that any statesman, or even the humblest politician, has ever been guided to useful action by such knowledge' would demonstrate its absolute fallacy.

I trust that means will be found for the purposes of research to establish closer relations between this Academy and cognate societies, such as the Hellenic Society, the Classical Association of England and Wales, the British Schools at Athens and Rome, the Philological Societies of Oxford, Cambridge, and London. I need not mention other societies, which in other sections might be asked to co-operate with us. The Academy is also prepared to invite those who do not belong to it to read short papers.

I think that one of the tasks we shall have to undertake is, at intervals, to focus the results of study, to give a survey of the field of classical work, marking the mutual bearings of the discoveries and researches in kindred departments.

To unify the idea of ancient learning and of the life of antiquity is becoming more and more difficult. For this work of reconstruction the Academy has special facilities. I think the sections of history, philology, and philosophy might confer together on this subject and issue a joint report.

As universities multiply the need for concentration will be more widely felt. The Academy will afford to the representatives of our universities an opportunity of exchanging views on the direction to be given to research. The Academy is in touch with the universities, and this relation will probably grow more intimate.

I believe that for a collection of papyri the time will soon be ripe.

I am convinced that we have duties to discharge which it will take all our energy to perform adequately.

Not the least significant of the signs of the times is the fact that the address to which I have referred was delivered in the very home of culture itself, and there could be no better demonstration of the need for the vigorous maintenance of an Academy in England for the safe-guarding and promotion of humane learning; nay, I feel sure that many an ardent supporter of the physical sciences will re-echo our fervent prayer, *Floreat Academia Britannica.*

FOURTH ANNUAL GENERAL MEETING

June 28, 1906

ADDRESS BY THE PRESIDENT, LORD REAY

IT is my duty on this occasion of our Annual General Meeting to survey, however briefly, the affairs of the Academy during the past twelve months, and I may be permitted to refer in the first instance to what is perhaps uppermost in the minds of many of us, namely, that we cannot, alas! to-day number in our midst two members of our body who twelve months ago were our honoured colleagues. By the death of the late Provost of Oriel, Dr. Monro, and of Sir Richard Jebb, a void is left in our midst which for long years to come will be keenly felt. When last year it was my privilege to offer our congratulations to Jebb on his well-merited inclusion in the Order of Merit, I expressed the hope, which has proved all too vain, that he might enjoy the honour for long years to come. It is a source of comfort to us that he appreciated our devotion towards him, and I know he felt gratified by the words I then uttered, and which now with pathetic interest I may well repeat.—'It can never be forgotten how great has been his service in the early days of the foundation of the British Academy.' Let us again to-day pay gracious and due tribute to the memory of those of our Founders who have passed from us, leaving behind on those who survive the high duty of shaping the destiny, watching the fortunes, and advancing the cause, of the Society which is still in its infancy; four years is but a short time in the history of a National Academy of Learning.

Indeed, bearing this fact in mind, I venture to think that we have no cause for dissatisfaction as we consider the present position of the Academy, and its activity during the past year. Important Papers have been read, and for the most part have already been issued to the Fellows, and to those of the general Public who desire to have them. It is gratifying to note that the sale of the Papers as Brochures is considerable, as may be seen from the Balance Sheet before you. Volume II of the 'Proceedings' is in an advanced state of progress, and will be issued at the beginning of next year. The Papers of the year were read by the following Fellows:—Mr. Haverfield, on the

'Romanization of Roman Britain;' Dr Fairbairn on 'The Language of the New Testament,' Dr. Wright on 'The Philological Value of English Dialects,' Dr. Hodgson on 'The Inter-relation of the Academical Sciences;' Professor Skeat on 'The Problem of English Spelling Reform,' Professor Rhys on 'Celtic Inscriptions;' Sir Edward Fry on 'The Rights of Neutrals;' and Professor Bosanquet on 'The Meaning of Teleology,'—a varied field of speculation indicative of the labours of the Fellows of the Academy, but only in a very small degree representative of the researches carried on by them, and of their published works during the past year. I desire especially to offer the Academy's congratulations to Dr. Joseph Wright on the completion of his monumental work on the English Dialects.

Still dealing with the internal work of the Academy, I should refer to the important General Meeting held in December last for the purpose of interchange of views, and discussion on any matters bearing on the business of the Academy. The Council has very carefully considered and given the utmost attention to the views expressed on that occasion, and some of the proposals have already been carried into effect. We desire to thank the Dean of Westminster for arranging an evening at his house in order that Fellows might have an opportunity of meeting together informally. great good must needs accrue from such social intercourse among the Fellows.

I shall later on explain the views of the Council on certain points raised at the Meeting.

The Academy has, of course, important schemes under consideration, the successful carrying out of which must depend on the question of finance; one project of truly national importance is being considered by a special sub-committee, viz., Professor Vinogradoff's proposal for editing a Series of Records of British Economic and Social History, valuable material extant in the Old English Manor Rolls. Such a scheme cannot be allowed to lapse.

As regards the Academy's work as a constituent of the International Association of Academies, I am able to report that we have received from the India Office the first grant of £200 towards the Cyclopaedia of Islam, and Professor de Goeje writes that this grant—to be continued conditionally for nine years more—is proving of the utmost value for the carrying out of the enterprise. At the recent meeting of the Council of the International Association held at Vienna, the Academy was ably represented by Professor Bywater, who has kindly accepted the invitation of the International Committee on the proposed Greek Thesaurus to serve on that Committee in the place of Sir Richard Jebb. Next year the Academies will assemble

at Vienna. Let us hope that by that time we shall be able to meet the representatives of other and older Academies unabashed by the consciousness of poverty. Meanwhile, practising economy in our home affairs, we are not altogether without means—but much more important than finance is our whole-hearted devotion to the cause of the Academy. With that feeling linking all together nothing can possibly deter us, though we may have to proceed more slowly and more patiently than would be necessary were we even moderately blessed with public endowment. Again, as last year, I echo our fervid sentiment towards our society, in the simple old-fashioned form, *floreat Academia Britannica.*

CERVANTES IN ENGLAND

By JAMES FITZMAURICE-KELLY

CORRESPONDING MEMBER OF THE ROYAL SPANISH ACADEMY

Read January 25, 1905

IN COMMEMORATION OF THE TERCENTENARY OF 'DON QUIXOTE'

LORD REAY, YOUR EXCELLENCIES, AND GENTLEMEN :—

My first duty is to express to the Council and to the members of the British Academy my thanks for the distinguished honour which they have done me in inviting me to address them on this occasion of high international interest; and my second duty is to deliver to you, Lord Reay, a message from your learned brethren who form the Royal Academy of Spain. As a member of that ancient and illustrious body, desirous of associating itself with your proceedings to-day, it falls to me to act as its spokesman, and to convey to you its fraternal greetings as well as its grateful recognition of the prompt enthusiasm which has impelled you to take the lead in honouring the most famous literary genius that Spain can boast. You have met together here to do homage to one of the great men of the world, and to commemorate the publication of the book with which he endowed mankind just three hundred years ago. It is in strict accordance with historic tradition that you, as the official representatives of British culture, should be the first learned body in Europe to celebrate this tercentenary, and I propose to show that, since the first decade of the seventeenth century, this country has been foremost in paying tribute to an amazing masterpiece. The work has survived, no doubt, by virtue of its intrinsic and transcendent merits ; but, like every other creation, it has had to struggle for existence, and it is gratifying to us to remember that British insight, British appreciation, British scholarship, and British munificence have contributed towards the speedier recognition of Cervantes's genius. I will ask your permission, my Lord, to demonstrate this restricted thesis instead of taking you and your colleagues through the labyrinth of æsthetic criticism for which the subtle ingenuity of three centuries is responsible. But it may

not be out of place to begin with a few words concerning the author of *Don Quixote* and the circumstances in which his romance was produced.

Many alleged incidents in his picturesque career have afforded subjects to poets and dramatists and painters; but these are exercises in the domain of imagination, and the briefest summary of ascertained facts will be more to my purpose Miguel de Cervantes Saavedra was born at Alcalá de Henares in 1547. The son of a humble apothecary-surgeon, without a university degree, and constantly wandering from town to town in search of patients, Cervantes cannot well have received a systematic education, but we really know nothing of his youth except that, at some date previous to 1569, he composed copies of mediocre verses dedicated to Philip the Second's wife, Isabel de Valois. He is next heard of as chamberlain to the future Cardinal Acquaviva at Rome, thence he passed into the army, fought under Don John of Austria at Lepanto (where he received the wound in his left hand which was to be a source of greater pride to him than any of his writings), shared in the Navarino and Tunis campaigns, and, after five years of service, set sail for Spain to seek promotion. He was captured by Moorish pirates on September 26, 1575, and was carried into Algiers, where his heroic conduct won him—not only the admiration of his fellow prisoners, but—the respect of his taskmasters. After nearly five years of slavery in Algiers, during which period he wrote verses (some of which have been preserved), he was ransomed on September 19, 1580, returned to Spain, was apparently employed in Portugal, married at the end of 1584, and in the following year published the First Part of an artificial and ambitious pastoral romance, *La Galatea*. At this time he was writing numerous plays which, so he tells us, won popular favour, evidently they were not so successful as their author imagined in his retrospect, for in 1587 Cervantes sought and found less congenial occupation in collecting provisions for the Invincible Armada. It was ill-paid work, but it gave him bread, while literature and the drama did not. This is his first association with England, and it was no fault of his if the equipment of the Armada was not complete, for he perquisitioned with such tempestuous zeal as to incur a threat of excommunication from the ecclesiastics whose stores he seized. He remained in the public service as collector of revenues, not greatly to his own satisfaction (to judge by his application for one of four posts vacant in America), and not altogether to the satisfaction of his official superiors (to judge from the fact that he was imprisoned at Seville in 1597 for irregu-

larities in his accounts). He was soon released, but apparently was not reinstated. We cannot wonder at this. he had not the talent for routine.

The next six or seven years must have been the dreariest period of Cervantes's life He lingered on in Seville, to all seeming ruined beyond hope. But he was not embittered: *ex forti dulcedo.* The alchemy of his genius was now free to work, free to transmute his personal misfortunes into ore more precious than that which the Spanish argosies brought from the mines of Potosí. In the Triana and other poor quarters of Seville, he had daily opportunities of studying the originals of Ginés de Pasamonte and of Rinconete and Cortadillo, two diverting picaroons who perhaps came into existence before Sancho Panza; and in Seville, from 1597 to 1603, he had time to compare the dreams of life with its realities All unconsciously he had undergone an admirable preparation for the task which lay before him. The vicissitudes of his troubled existence constituted an inexhaustible intellectual capital. To any ordinary eye they might seem a collection of unmanageable dross, but the man of genius wields a divining-rod which leads him through the dusk to the spot where the hidden treasure lies; and so it happened with Cervantes. In the course of his long rides, collecting the King's taxes, he had observed the personages whom he has presented so vividly as to make them real to each of us three hundred years afterwards. It is the paramount faculty of imaginative creation to force us to see through the medium of its transfiguring vision, and we have the privilege of knowing Spain in Cervantes's transcription of it. We accompany him in those journeys across baking plains and sterile mountains and we meet the characters with whom he was familiar. We cannot doubt that he had encountered innkeepers who could cap a quotation from an ancient ballad, and who delighted in the incredible adventures of Cirongilio of Thrace or of Felixmarte of Hircania; demure Toledan silk-mercers on the road to Murcia, with their sunshades up to protect them against the heat, barbers who preferred Galaor to his more famous brother Amadís of Gaul, and who were pleased to have Ariosto on their shelves even though they could not read him; Benedictine monks peering through their travelling spectacles from the backs of mules as tall as dromedaries; canons far better acquainted with the romances of chivalry than with Villalpando's treatise on logic; amorous and noble youths from Aragón, disguised as muleteers; and perhaps a poor old-fashioned gentleman who in some solitary hamlet pored and pored over tales of chivalrous deeds till he persuaded himself that he

was born to repeat these exploits and to restore the golden age —that happy time when maleficent giants were neatly divided at the waist by knights whose hearts were pure, and who themselves avoided similar inconveniences by timely recourse to Fierabras's inestimable balsam, two drops of which joined to a nicety the severed halves of a bisected paladin.

The time was coming when these casual acquaintances, embellished by the sunniest humour and most urbane irony, were to find place in Cervantes's rich portrait-gallery and were to be his glory as well as our delight. While he was giving artistic form to his reminiscences as chamberlain, soldier, slave, poet, romancer, dramatist, tax-gatherer, and broken wanderer, his knowledge of life was continually extending. The Treasury was constantly upon his track. What actually took place is somewhat obscure: Cervantes was (probably) imprisoned once more in 1598 and (almost certainly) again in 1601–2. It may have been in Seville jail that he began to write what he describes as a story 'full of thoughts of all sorts and such as never came into any other imagination—just what might be begotten in a prison, where every misery is lodged and every doleful sound makes its dwelling.' What is certain is that early in 1603 he was ordered to appear before the Exchequer Court there to produce his vouchers and explain his confused accounts. It was the most fortunate thing that could have happened to him. We may be tolerably sure that the loose book-keeping which had perplexed the Treasury clerks for years was not made clear in an instant, and that Cervantes's examination was prolonged over a considerable period, and it seems likely that, on one of his journeys to and fro between Seville and Valladolid, he disposed of a manuscript which had passed through many hands before it found a publisher. This was the manuscript of *Don Quixote.*

The internal evidence of the book shows that Cervantes began hesitatingly and tentatively, intending to write a comparatively short story about a simple-hearted country-gentleman, mooning his years away in some secluded hamlet till his craze for chivalrous adventures led him into absurd situations which invited description in a spirit of broad farce. The opening words of the sixth chapter —*El qual dormia*—are awkwardly carried on from the fifth chapter, and they go to show that no division of material was originally contemplated. Moreover, we may say with some confidence that the existence of the accomplished Sancho Panza is the result of an afterthought, the idea probably occurred to Cervantes just after penning the innkeeper's statement that knights were commonly attended by squires. And it is curious to remark that the author

fails at first to visualize the figure of Sancho Panza; he falters in the attempt to draw the short, ventripotent rustic, and as late as the ninth chapter describes him as tall and long-shanked. A long-shanked Sancho! One would have said that such a being was inconceivable had not his creator first seen him in that strange form.

The writer's primary aim was to parody a class of literature which, though no longer so much appreciated at court as in the days of Juan de Valdés, or at the time when it seemed natural to call California after the griffin-haunted island in *Las Sergas de Esplandián*, still had its admirers in the provinces; and the parody is wholly admirable. But a mere parodist, as such, courts and even condemns himself to oblivion, and, almost necessarily, the more complete his success, the sooner he is forgotten by all save students the books which he ridicules perish, and the burlesque dies with them. The very fact that *Don Quixote* survives is proof that it outgrew the author's intention. Cervantes himself informs us that his book is, 'from beginning to end, an attack upon the romances of chivalry,' and we have no reason to justify us in rejecting this statement. Still we must interpret it in relation to other matters. Cervantes can never have meant to destroy so excellent an example of the feudal prose epic as *Amadís de Gaula*, a long romance which he must have known almost by heart: for in the twentieth chapter he draws attention to the minute circumstance that the taciturn Gasabel, the squire of Galaor, 'is only named once in the whole of that history, as long as it is truthful.' And no man charges his memory with precise details of what he considers a mass of grotesque extravagances, of egotistical folly, and vapouring rant. The extravagances, the folly, and the rant which disfigure the works of such writers as Feliciano de Silva are destroyed for ever. What was sound and wholesome in the tales of chivalry is preserved in *Don Quixote*. preserved, illuminated, and ennobled by a puissant imagination playing upon a marvellously rich experience.

The Manchegan madman has his delusions, but he is deluded on one point only. in all other respects he touches the realities of life and he remains a perpetual model of conduct, dignified in disaster, magnanimous in victory, keen in perception, subtle in argument, wise in counsel. With him goes, as a foil to heroism, Sancho Panza, that embodiment of calculating cowardice, malicious humour, and prosaic common sense. This association of the man abounding in ideas with the slower-witted, vulgar, practical person, vaguely recalls the partnership of Peisthetairos and Euelpides; and

Aristophanes himself has no happier touch than that which exhibits Sancho Panza, aware that his master is too mad to be depended on in any other matter, but yet convinced that he may certainly be trusted to provide the unnamed nebulous island which the shrewd, droll villager feels a statesmanlike vocation to govern Can we wonder that the appearance of this enchanting pair was hailed with delight when the history of their sallies was published at Madrid early in 1605? We know that it was 'the book of the year,' that within some six months there were pirated editions in Portugal, a second edition in Madrid, a provincial edition at Valencia, and that by June people in Valladolid spoke of the adventurous knight and his squire as though both were proverbial characters. Other contemporary novels—*Guzmán de Alfarache*, for instance—may have had a larger circulation; but the picaroon Guzmán was (by comparison) merely the comet of a season, while the renown of the Ingenious Gentleman is more universal to-day than it has ever been. His fame soon spread beyond the Pyrenees, and in 1607 a Brussels publisher reprinted the original to meet the demands of the Spaniards in the Low Countries. The book was thus brought within reach of readers in the north of Europe, and they lost no time in profiting by their opportunity. There are signs of *Don Quixote* in France as early as 1608, but we may neglect them to-day, more especially as there are still earlier traces of the book in this country.

We read of Richard Cœur-de-Lion helping to defend Santarem against the Moors, of the Black Prince's battles in Spain, of two or three thousand English pilgrims yearly visiting the shrine of Santiago de Compostela But the literary connexion between the Peninsula and England was slight. Early in the fifteenth century Clemente Sánchez de Vercial translated Odo of Cheriton's *Narrationes* under the title of *El libro de los gatos*; the *Speculum Laicorum*, an adaptation of Odo of Cheriton's work commonly ascribed to John Hoveden, was translated into Spanish at about the same period; then too Gower's *Confessio Amantis* was translated into Portuguese by Robert Payne, Canon of Lisbon, and, later, into Spanish by Juan de Cuenca; and the distinguished poet Francisco Imperial introduces English words into his verses. These few examples imply no great acquaintance with English literature, and we may say that there was practically no knowledge of Spanish literature in England till the beginning of the sixteenth century, when, in the year following the publication of *Amadís de Gaula*, Henry the Eighth married Catharine of Aragón. Spanish scholars visited London and Oxford, and though, as in the case of

Vives, they may have censured some of the most popular Spanish books of the time, intercourse with them must naturally have awakened interest in the literature of their country. The results were seen in Lord Berners's renderings of works by Fernández de San Pedro and Guevara, and Guevara found other translators in the persons of Bryan, North, Fenton, and Hellowes. Santillana was done into English by Barnabe Googe, who had already given versions of poems by Montemôr, Boscán, and Garcilaso de la Vega, Abraham Fraunce quoted the two latter poets in *The Arcadian Rhetorike*, Sidney versified songs by Montemôr, and there are translations of such devout writers as Luis de Granada. With histories, technical works and the like, I am not concerned here. It is more to our purpose to note that *Amadís de Gaula* was translated by Anthony Munday in 1589-95, and that it pleased readers to identify *Gaula* with Wales and to discover in the romance places so familiar to them as London, Windsor, and Bristol. Part of an earlier version by Lord Lennox exists in manuscript.

The ground was thus prepared for Cervantes, and the new parody of knight-errantry was certain to charm those who regretted that Chaucer's tale of *Sir Thopas* had been so brusquely interrupted. In the very year that the Brussels edition made *Don Quixote* more easily available a translation of the book was begun by Thomas Shelton, finished in forty days, and then laid aside for four or five years, and that there were other more or less attentive readers of *Don Quixote* is shown by many passages in contemporary authors—passages which have been collected by investigators like Emil Koeppel. George Wilkins, though possibly responsible for the rough sketches elaborated by a far greater artist into *Timon of Athens* and *Pericles*, is not precisely a writer of impressive independence and originality rather, indeed, is he one whose eyes are constantly on the weathercock, watching the direction of the popular breeze. It is therefore all the more significant that in the third act of *The Miseries of Inforst Marriage*, a play given in 1607, Wilkins should make the tipsy braggart William Scarborow say:—

> Boy, bear the torch fair: now am I armed to fight with a windmill, and to take the wall of an emperor.

'To fight with a windmill!' The expression betrays its source; it would be unmeaning to any one unacquainted with the eighth chapter in which Cervantes describes Don Quixote's terrible adventure with the giants whom the wizard Friston had transformed into windmills upon the plain leading to Puerto Lápice. Wilkins was

not the man to write above the heads of his audiences, and he clearly believed that they would catch the point of the allusion. The experiment was evidently successful, for, in the following year, Middleton repeated it in the fourth act of *Your Fair Gallants*, presenting Pyamont exasperated at the loss of his forty pounds and furiously declaring:—

> I could fight with a windmill now.

A year or two passes and (probably about 1610) Ben Jonson in the fourth act of *The Epicene* causes Truewit to address Sir Dauphine Eugenie in these terms.—

> You must leave to live in your chamber, then, a month together upon Amadis de Gaul, or Don Quixote, as you are wont

Manifestly the knight's reputation was made, for within three years he took rank as the equal of his great predecessor, Amadís de Gaula, whose penance on the Peña Pobre (a locality which has been identified with the island of Jersey) he had imitated with such gusto on the Sierra Morena. That the reference was seized by the public is plain from its repetition next year by the same dramatist in the fourth act of *The Alchemist*, where Kastril vilifies Drugger as

> a pimp and a trig,
> And an Amadis de Gaul, or a Don Quixote

To about this date (1611) is assigned the composition of Fletcher's *Coxcomb* and Nathaniel Field's *Amends for Ladies*, which are both based upon the story of the Curious Impertinent interpolated in Chapters XXXIII–XXXV of *Don Quixote*. You may perhaps remember that Lothario compares Anselmo's wife, Camila, to 'a diamond of the first water, whose excellence and purity had satisfied all the lapidaries that had seen it.' Field preserves the simile in one of the speeches allotted to Sir John Love-all:—

> To the unskilful owner's eyes alike
> The Bristow sparkles as the diamond,
> But by a lapidary the truth is found.

This same episode of the Curious Impertinent, which Lessing and other critics have found tedious, furnished the theme of *The Second Maid's Tragedy*, a play variously ascribed to Goughe, to Chapman, to Shakespeare, and—with more probability—to Massinger and Tourneur: and here again the simile of the virtuous woman and the diamond is reproduced. Shelton's translation was printed in 1612, and was speedily followed by a very frank adaptation of *Don Quixote* in *The Knight of the Burning Pestle*. Fletcher makes no attempt to disguise the source of his piece. but it is amusing to observe his

anxiety to assure his public that he knows Spanish too well to need Shelton's rendering, and that in fact his play had been completed a year before the prose version was published. In 1613 Robert Anton closes his *Moriomachia* with a reference to 'Mambrinoes inchaunted helmet'; and both the knight and the squire are mentioned later in Drayton's *Nymphidia*.

This record is not meagre; but, since the ascription to Shakespeare of *The Second Maid's Tragedy* is no longer maintained by any competent scholar, one mighty name is missing from the bede-roll. Did Shakespeare know *Don Quixote*? The question is constantly asked, and the usual answer is that he could not have read the book because he knew no Spanish. I am reminded of the advice given to a newly appointed judge whose knowledge of law was rusty —'Give your decision and it may be right; never give your reasons, for they are sure to be wrong.' I do not dwell on the passage in *Much Ado About Nothing* which recalls *Lazarillo de Tormes*, nor on the points of resemblance between Montemôr's *Diana* and the *Two Gentlemen of Verona* they do not necessarily imply a knowledge of Spanish. But it is certain that Shakespeare might easily have known *Don Quixote* without knowing Spanish, for Shelton's version was in print four years before Shakespeare died. Apart from this, however, the longer one lives the more chary one becomes of committing oneself to absolute statements as to what Shakespeare did, or did not, know. He may not have been an expert in Spanish: probably he was not. But he seems to have known enough to read a collection of dull stories published at Pampluna in 1609, and at Antwerp in 1610. This volume, never translated (so far as is known) into any other language, is the *Noches de Invierno* of Antonio de Eslava, and the title of *A Winter's Tale* is obviously taken from the title of the Spanish book. This, if it stood alone, might be explained away as an instance of unconscious reminiscence. However, as we have lately learned—from Dr. Garnett, amongst others—Shakespeare's debt to Spain goes much beyond the mere borrowing of a title: for, from the fourth chapter of the *Primera Noche de Invierno* comes the plot of *The Tempest*, Prospero of Milan and his daughter Miranda being substituted for Dardano of Bulgaria and his daughter Serafina. All things considered, perhaps we should not dismiss too cavalierly a belated entry in the register of the Stationers' Company: '*The History of Cardenio* by Mr. Fletcher and Shakespeare, 20*s*.' The lateness of the date (1653) deprives this entry of authority, and, as the play has vanished, it is impossible to discuss the question of its attribution; but we may plausibly conjecture that

Shakespeare, or some younger contemporary, found material for yet another drama in the story told to Don Quixote by the tattered, distraught Andalusian gentleman whom he met wandering near the Venta de Cárdenas on the northern slope of the Sierra Morena

Meanwhile, though the presses of Spain, Italy, and the Low Countries continued to issue reprints of the original in 1608, 1610, and 1611 respectively, the author was in no haste to publish the continuation mentioned at the end of the First Part. There we are told that an academician of Argamasilla had succeeded in deciphering certain parchments containing Castilian verses, 'and that he means to publish them in hopes of Don Quixote's third sally.' The promise is vague, and, such as it is, the pious aspiration is perhaps neutralized by a final ambiguous verse from the *Orlando furioso* :—

Forse altri canterà con miglior plettro.

These concluding sentences have given rise to so much controversy that I shall be justified in dwelling upon them for a moment. If we consider the text and the quotation from Ariosto together, the passage may be taken to mean that any one who chose was welcome to continue the story, or it may be construed as an announcement of Cervantes's intention to publish a sequel himself. Now, in view of what happened afterwards, the significance of these phrases may seem obvious; but we are not entitled to interpret them solely in the light of subsequent events. The questions for us to answer are two: what did Cervantes intend to convey when he wrote the passage? and what interpretation might his contemporaries fairly put upon it? If he meant that any other writer was free to publish a continuation of *Don Quixote*, he had no cause for complaint when he was taken at his word If he meant that he himself would issue the sequel, it is unfortunate that he did not say so with his customary plainness, and strange that he delayed so long in following up his triumph.

It was not till 1613, more than eight years after the appearance of the First Part, that he publicly announced the sequel as forthcoming. Any honourable man who was already engaged upon a continuation would have laid his work aside and left the original author in possession of the field. Unluckily the idea of continuing *Don Quixote* had occurred to an unscrupulous writer. It is no easy task to be just, in this matter, to Cervantes and to his competitor; for, while Cervantes is, so to say, the personal friend of each man amongst us, his obscure rival has contrived to lose the respect of the whole world. But it is our duty to attempt it. In the first place, then, let us bear in mind that Cervantes was often almost as optimistic as

Don Quixote; the conception of a book flashed into his brain, and he looked upon the composition as a mere detail. In this very prologue which announces the Second Part of *Don Quixote*, Cervantes announces two other books *Los Trabajos de Persiles y Sigismunda*, which appeared posthumously, and *Las Semanas del Jardín*, which never appeared at all. Elsewhere he promises works to be entitled, *El Engaño á los ojos* and *Bernardo*, and these never appeared either. During thirty-one years, on five separate occasions, he promised the sequel to *La Galatea*, and that also never appeared. It has been argued that, in announcing the sequel to *Don Quixote*, Cervantes is fairly categorical; he promises it 'shortly' (*con brevedad*). He undoubtedly does, but the words are of evil omen, for he used the same formula when he first promised the continuation of *La Galatea* In the second place, we cannot infer (as we might in the case of a punctilious precisian who weighed his words carefully) that the Second Part of *Don Quixote* was nearly completed when Cervantes referred to it in the preface to his *Novelas exemplares*, which was licensed on July 2, 1612. Far from it! He may not have written even a chapter of it at that date; he had not written half of it on July 20, 1614, the memorable day on which the newly fledged Governor, Sancho Panza, dictated his letter to his wife Teresa. It follows that, if Cervantes worked at anything like a uniform rate of speed, he cannot have begun the sequel till about January, 1614.

These circumstances, more or less attenuating, should be taken into consideration before passing sentence on Alonso Fernández de Avellaneda, who, in 1614, brought out a spurious continuation of *Don Quixote*, a clever, coarse performance, which, especially in Le Sage's expanded version, has often been mistaken—by Pope, for instance, in the *Essay on Criticism*—for the authentic sequel. Avellaneda had a fair, or at least a plausible, case, but he completely ruined it by the ribaldry of his preface, in which he jeers at Cervantes's misfortunes and alleged defects of character—his mutilation, his imprisonment, his poverty, his stammer, his jealousy, his lack of friends. These brutalities wounded Cervantes to the soul, and led him to conclude the Second Part of *Don Quixote* in all haste. Thus, quite unintentionally, the insolent railer probably saved the book from the fate which befell the sequel to *La Galatea*, and the other works already mentioned. Avellaneda deserves our ironical congratulations: he meant murder, but committed suicide.

Within a year of his intrusion the genuine continuation of *Don Quixote* was published, and it amply disproved the truth of Sansón Carrasco's remark: 'Second Parts are never good.' Goethe and

Hallam preferred the First Part, and unquestionably the Second is but a splendid development of what preceded it Coleridge draws a characteristic distinction · 'Who can have courage to attempt a reversal of the judgement of all criticism against continuations? Let us except *Don Quixote*, however, although the Second Part of that transcendent work is not exactly *uno flatu* with the original conception.' The First Part is the more humorous and fantastic, the Second Part is the more ingenious and artistic, but nobody has ever contended that this Second Part was 'not good,' with the single exception of Lamb, who was betrayed into this freakish outburst: 'Marry, when somebody persuaded Cervantes that he meant only fun, and put him upon writing that unfortunate Second Part, with the confederacies of that unworthy Duke and most contemptible Duchess, Cervantes sacrificed his instinct to his understanding.' 'Sacrificed his instinct to his understanding!' It may amount to a confession of ineptitude, but I confess I am not nearly so sure as I could wish to be that I catch the precise meaning of this expression, and I prefer not to take it too seriously. It occurs in a letter addressed to Southey, and perhaps not even the most judicial of us would care to abide by every word let fall in the careless freedom of private correspondence. At any rate posterity has not accepted Lamb's emphatic verdict. Nor did the writer's contemporaries and immediate successors find anything but praise for the story of Don Quixote's later exploits.

Cervantes lived just long enough to witness his triumph, and he needed all the solace that it could give him. Old and infirm, he was eclipsed in popular favour by the more dazzling and versatile genius of Lope de Vega, then in the meridian of his glory. We must distinguish between fame and popularity. Famous Cervantes was both in and out of Spain, he was not, like Lope, the idol of his countrymen. The greatest of all Spaniards, in life more than in death, Cervantes's appeal was rather universal than national. He had survived most of his own generation, lived into a less heroic time, and, though he was no philosopher or sociologist, perhaps viewed with some misgivings the new society which had replaced the age of chivalry.

> He look'd on the rushing decay
> Of the times which had shelter'd his youth—
> Felt the dissolving throes
> Of a social order he loved—
> Outlived his brethren, his peers;
> And, like the Theban seer,
> Died in his enemies' day.

He died, in fact, on April 23, 1616—nominally on the same day as Shakespeare, and we ask for nothing better than to be allowed to forget the difference between the calendars of Spain and England, and, adapting Homer, to say that in both countries the sun perished out of heaven at the same hour.

Before long the Second Part of *Don Quixote* reached England in the Brussels edition of 1616. Probably the earliest trace of it occurs about 1619 in the fifth act of *The Double Marriage*, where Fletcher and Massinger introduce a scene between the courtier Castruccio and the doctor which is unmistakably modelled after the account in the forty-seventh chapter of Pedro Recio de Aguero's attempt to deprive Sancho Panza of his dinner. In 1620 the sequel to *Don Quixote* was brought directly before the English public in Shelton's translation, and in this same year Thomas May, in the first act of *The Heir*, after making Clarimont refer to 'the unjust disdain of the lady Dulcina del Toboso,' describes Amadís de Gaula and Don Quixote as 'brave men whom neither enchantments, giants, windmills, nor flocks of sheep, could vanquish.' This, of course, is from the First Part, but in 1620 Fletcher inserted one detail from the Second Part in *The Pilgrim*, and, in 1623, the second act of Massinger's play *The Duke of Milan* reveals Mariana taunting her sister-in-law Marcelia with suffering from an issue: a reminiscence of the scandal about the Duchess confided to Don Quixote's reluctant ear by Doña Rodríguez in the forty-eighth chapter of the Second Part.

In the third decade of the seventeenth century writers in search of a theme sought it oftener in the *Novelas exemplares* than in *Don Quixote*. For instance, in 1621–2 Middleton and Rowley based *The Spanish Gipsie* on *La Gitanilla* and *La Fuerza de la Sangre*. A more assiduous follower of Cervantes was Fletcher, who in 1619 derived *The Queen of Corinth* from *La Fuerza de la Sangre*; in 1621, collaborating with Massinger, Fletcher based *A Very Woman* on *El Amante liberal*, in 1622 he inserted in *The Beggars' Bush* some touches from *La Gitanilla*; in 1623, perhaps aided once more by Massinger, he produced *Love's Pilgrimage* from *Las dos Doncellas*; in 1624 *El Casamiento engañoso* yielded him *Rule a Wife and have a Wife*; in 1625–6 he transformed *La Ilustre Fregona* into *The Fair Maid of the Inn*; in 1628 he went afield to take *The Custom of the Country* from Cervantes's posthumous romance, *Los Trabajos de Persiles y Sigismunda*; but he returned later to the *Novelas exemplares* and dramatized *La Señora Cornelia* as *The Chances*. A still more convincing proof of English interest

concerning Cervantes's writings is afforded by the fact that Massinger in 1624 wrote *The Renegado* in view of the set drama entitled *Los Baños de Argel*, and *The Fatal Dowry* in 1632 showed a knowledge of the *entremés* entitled *El Viejo celoso* It was comparatively easy for Fletcher to read the *Novelas exemplares* in the Brussels edition of 1614; but, as the volume of plays issued by Cervantes in 1615 was not reprinted till 1749, it is evident that Massinger must have taken the trouble to procure a copy of the Madrid *princeps*—a difficult matter at that date.

This fashion ran its course, as you may read in the Master of Peterhouse's admirable *History of English Dramatic Literature*; and, in due time, English writers went back to *Don Quixote*. In 1630 Davenant printed *The Cruell Brother*, borrowing from Cervantes the name of one personage and the characteristics of another:—

> Signior
> Lothario; a Country Gentleman
> But now the Court Baboone, who persuades himselfe
> (Out of a new kind of madness) to be
> The Duke's favourite. He comes. Th' other is
> A bundle of proverbs, whom he seduc'd
> From the plough, to serve him for preferment.

In 1635 an allusion to the 'good knight of the ill favor'd Countenance' is used to ornament the third act of *The Lady Mother* by Henry Glapthorne, a dramatist of no great repute, whose *Wit in a Constable*, published four years afterwards, contains Clare's intimidating question to Sir Timothy Shallowwit.—

> Is it you,
> Sir Knight of the ill favor'd face,
> That would have me for your Dulcinea?

In 1640 appeared James Mabbe's fragmentary version of the *Novelas exemplares* which Godwin esteemed as 'perhaps the most perfect specimen of prose in the English language.' It is enough to call it admirable. But let me say frankly that I have two grudges against Mabbe. one because he omits six of the novels, perhaps the best in the collection. the other because, though he resided in Madrid from 1611 to 1613 as a member of Digby's mission, he apparently took no trouble to meet Cervantes and gives us no information concerning him. Surely this is one of those rare cases in which all but the most austere of men would welcome a little 'personal' journalism.

'I have almost forgot my Spanish, but after a little may recover it,' says Riches in Shirley's masque *A Contention for Honour and*

Riches, which dates from 1632, and perhaps Riches here speaks for the modest author. However that may be, Shirley knew enough Spanish to utilize Tirso de Molina in his *Opportunity* and Lope de Vega in *The Young Admiral*, hence it is not surprising that, when recasting his masque in 1652 under the title of *Honoria and Mammon*, he should introduce the 'forehead of Dulcinea of Toboso' into the fifth act. *The Double Falsehood*, based on Cardenio's story and ascribed by Lewis Theobald to Shakespeare, has been conjecturally attributed to Shirley; but this is doubtful. During the Protectorate the only contribution specially interesting to the student of Cervantes is the curious, festive commentary by Gayton whose *Pleasant Notes upon Don Quixote* are still well worth reading. The Restoration was barely accomplished when in 1663 Butler launched the first part of *Hudibras*, a witty, pointed, violent lampoon written in imitation of Cervantes, but with blustering humour and rancorous jibes substituted for the serene grace and bland satire of the master. In 1671 Aphra Behn's play *The Amorous Prince* showed how much that was objectionable could be infused into the story of the Curious Impertinent, but Aphra Behn was outdone in 1694 and 1696 by D'Urfey whose *Comical History of Don Quixote* provoked Collier's famous *Short View of the Immorality and Profaneness of the English Stage*. It is one of life's ironies that this fulminating protest should have been called forth by a work professedly derived from Cervantes who justly prided himself on the morality of his writings.

D'Urfey was left to bear the burden of his sins. Cervantes's vogue in England continued unchecked. Temple proclaimed *Don Quixote* to be, as satire, 'the best and highest strain that ever has been, or will be, reached by that vein.' Spence tells us that Orford's inquiry whether Rowe knew Spanish led the latter to study the language, perhaps in the hope that it might lead to the Embassy at Madrid. Having mastered Spanish, Rowe announced the fact to Orford who drily said 'Then, sir, I envy you the pleasure of reading *Don Quixote* in the original.' And no doubt Rowe did read it, and hence a line in *The Fair Penitent* which use has converted into a tag:—

> Is this that haughty gallant, gay Lothario?

Addison gave a somewhat lukewarm allegiance to Cervantes in *The Whig Examiner* (No. 3) and in *The Guardian* (No 135), as well as in *The Spectator* (Nos. 227 and 249), linking *Don Quixote* with *Hudibras*, and talking (not very acutely) of 'mean Persons in the Accoutrements of Heroes.' Steele did better when he promoted 'the accomplish'd Spaniard' to be patron of the Set of Sighers

in the University of Oxford. In 1719 Arbuthnot unsuccessfully attempted to imitate *Don Quixote* in his short *Life and Adventures of Don Bilioso de l'Estomac* Some biographers of Swift suggest that *A Tale of a Tub* is modelled upon *Don Quixote*, I see no trace of direct imitation, and nothing could be further apart than the Englishman's splenetic gloom and the Spaniard's delicate charm, but I admit that the unadorned diction and sustained irony of Swift recalls one of Cervantes's many manners.

A passage in the *Characteristicks* of the third Earl of Shaftesbury is worth quoting:—'Had I been a Spanish Cervantes and, with success equal to that comick Author, had destroyed the reigning taste of Gothic or Moorish Chivalry, I could afterwards contentedly have seen my burlesque itself despised and set aside.' This utterance is interesting, for it implies that in 1703 Cervantes was still considered to be essentially a 'comick Author' But a reference in *The Dunciad* to 'Cervantes's serious air' shows that Pope had a truer insight into the significance of a book which, as I have already said, he began by reading in Le Sage's amplification of Avellaneda. Henceforward, Cervantes becomes less and less regarded as a purely 'comick Author.' As far back as 1730 Fielding in the second act of *The Coffee-House Politician* declared that 'the greatest part of Mankind labour under one delirium or another, and Don Quixote differed from the rest, not in Madness, but the species of it' Fielding's play *Don Quixote in England* dates from 1734 and, poor as it is, it is a tribute to a great predecessor, a tribute paid more abundantly eight years later in the *History and Adventures of Joseph Andrews* where Parson Adams appears as an unmistakable descendant of Don Quixote's. *The Female Quixote*, an imitation by Charlotte Lennox which was published in 1752, is praised by Fielding in the *Journal of a Voyage to Lisbon*, and was lauded by Samuel Johnson, who thought that Cervantes's book had no superior but the *Iliad*. Sterne ranked Cervantes even above his other favourite, Rabelais, but we should have guessed this without Sterne's personal assurance, for page after page of *Tristram Shandy* is redolent of *Don Quixote*. Though the title of *The Adventures of Sir Launcelot Greaves* proves that Smollett had the Spanish book in view, the imitation is wholly unworthy of the model, and in *The Expedition of Humphrey Clinker* the resemblance which we are told existed between Lieutenant Lismahago and the Knight of La Mancha is merely physical. Smollett's imitative fiction is comparatively a failure but, as I shall show in an instant, he was a warm admirer of *Don Quixote*, and did Cervantes good service in another field. To that field I shall now turn, for *The Spiritual*

Quixote of Richard Graves, published in 1773, and similar productions of this period have lost whatever interest they may once have had.

During the eighteenth century there were numerous attempts in England to promote the serious study of Cervantes's works by means which cannot fail to interest a learned audience. We have seen that the earliest translation of the First Part of *Don Quixote* was published at London in 1612 by Shelton: Shelton's version of both parts was reprinted in 1731, and was also issued in a revised form by Captain John Stevens in 1700 and 1706. In 1687, Milton's nephew, John Philips, had published a miserable travesty of the original, and in 1700 the French refugee, Peter Motteux, brought out a readable version, which is based on Shelton's rendering, and checked by constant comparison with the French translation of Filleau de Saint-Martin. Motteux' version, which included the earliest biographical sketch of Cervantes, is still reprinted, less on account of its own merits than because of the excellent preface which Lockhart wrote for it in 1822. But it was felt that these publications were unworthy of English scholarship. As Shelton was the first man to translate *Don Quixote*, so a London publisher, Jacob Tonson, was the first to produce a handsome edition of the original, which put to shame the sorry reprints issued in Spain and elsewhere. Tonson's edition, published in 1738, was based upon the Brussels re-impressions of 1607 and 1611, was revised by Pedro de Pineda, and was preceded by the first formal biography of Cervantes ever issued. This life was written by the most eminent Spanish scholar of the age, Gregorio Mayáns y Siscar, who received the commission from the English ex-Secretary of State, Lord Carteret. In 1742 the painter, Charles Jervas, published a new rendering of *Don Quixote*, in some important respects an advance on previous versions. Spence records Pope's perfidious remark that his friend Jervas 'translated *Don Quixote* without understanding Spanish.' The charge is absurd: Jervas's knowledge of Spanish is beyond cavil. His English style is thought inadequate by critics, and his rendering is neglected by his later rivals; but innumerable cheap reproductions prove that it satisfies a multitude of less exacting readers. Jervas's version was likewise of great service to Smollett who utilized it extensively when engaged upon the translation which he issued in 1755; and the preface to this translation is exceptionally interesting, for here Smollett pointed out, six years before the point had occurred to any Spaniard, that the prisoner Cervantes, mentioned as a native of Alcalá de Henares in Diego de Haedo's *Topografía e Historia de Argel*, must be the

author of *Don Quixote* This detail, which was also made public at about the same time by Colonel Windham, practically settled the dispute as to Cervantes's birthplace A far more valuable contribution to students of Cervantes was the first commentary on *Don Quixote* ever published this was issued in 1781 by John Bowle, vicar of Idmiston, who has done more to elucidate Cervantes's masterpiece than any other commentator, with the possible exception of Clemencín. Envy and detraction did their worst in Baretti's venomous *Tolondron*; but in vain, for all the world over 'Don Bowle,' as his friends affectionately called him, is held in honour by every student of Spanish literature.

With the last century we reach ground familiar to all. It would be an endless and superfluous task to trace the allusions to Cervantes's great book in English literature of the nineteenth century. Byron tells us in *Don Juan* that Adeline, like Rowe,

> studied Spanish
> To read *Don Quixote* in the original,
> A pleasure before which all others vanish.

And her example was widely followed. Yet we may take it as certain that imperfect translations suggested the characters of Sam Weller, that Cockney variant of Sancho Panza, and of Colonel Thomas Newcome. 'They call him Don Quixote in India,' said General Sir Thomas de Boots, 'I suppose you have read *Don Quixote*?' 'Never heard of it, upon my word,' replied Barnes Newcome, whose only contribution to literature was a *Lecture on the Poetry of the Affections*. But Hazlitt had heard of *Don Quixote*, and Southey, Scott, Lockhart, Macaulay, and FitzGerald knew the original well. Macaulay esteemed it 'the best novel in the world, beyond all comparison,' and found it even 'prodigiously superior to what I had imagined,' while to FitzGerald it became '*the* Book.' I believe that it is included in the *Bibliothèque Positiviste*, and that Comte placed Cervantes himself in the Positivist Calendar. We have not yet made Cervantes our national saint, but no one has written more delightfully of him than that distinguished Positivist, Mr. Frederic Harrison; and the greatest of our romance writers, Mr. George Meredith, celebrates with enthusiasm Cervantes's 'loftiest moods of humour, fusing the tragic sentiment with the comic narrative.' The publication of three new and independent versions by Duffield, Ormsby, and Watts, in 1881, 1885, and 1888 respectively, is convincing proof of our unabated interest in *Don Quixote*. Two large quarto volumes—*quorum pars parva fui*—containing the first critical edition of the original appeared at the

very end of the nineteenth century, and, if they indicate nothing else, at least imply a boundless belief in the future of '*the* Book'; and the only satisfactory rendering of the *Novelas exemplares*, due to Mr Norman MacColl whom death has so recently snatched from us, figures in a translation of Cervantes' *Complete Works* which was begun in the first year of the twentieth century.

This brings my prolix exposition to a close. I have laid before you a body of facts to justify the assertions with which I began. I have shown that England was the first foreign country to mention *Don Quixote*, the first to translate the book, the first country in Europe to present it decently garbed in its native tongue, the first to indicate the birthplace of the author, the first to provide a biography of him, the first to publish a commentary on *Don Quixote*, and the first to issue a critical edition of the text. I have shown that during three centuries English literature teems with significant allusions to the creations of Cervantes's genius, that the greatest English novelists are among his disciples, and that English poets, dramatists, scholars, critics, agreed upon nothing else, are unanimous and fervent in their admiration of him. 'There is an everlasting undercurrent of murmur about his name, the deep consent of all great men that he is greater than they.' That, Lord Reay, is my case: it is for you and your colleagues in the British Academy to judge if I have proved it.

ERNST CURTIUS

By THOMAS HODGKIN

FELLOW OF THE ACADEMY

Read February 22, 1905

In the vestibule of the Museum at Olympia, just outside the halls which contain the group of Hermes and Dionysus, and the interesting but ruined sculptures which adorned the two great pediments of the temple of Olympian Zeus, is a bust in bronze representing the keen, thoughtful features of Professor Curtius. Rightly is he placed there, as if to guard the treasures of sculpture revealed by five years of excavation undertaken by the German Government at his entreaty and at the bidding of his friend and pupil, the Crown Prince (afterwards Emperor) Frederick.

The life of Curtius, peaceful and unadventurous as it might be considered, was one of striking contrasts and of great results springing from apparently trifling causes. It began in a quaint old German city within hearing of the billows of the Baltic, and it ended, or at least reached its culminating point, in the olive-studded plains of Olympia. It was the accident of the young student being chosen as tutor to the sons of a minister of King Otho, which gave to historical science some of the ablest treatises on Greek topography, to literature a delightful History of Greece, and to archaeology the originator of some of the most important excavations of the nineteenth century.

Lubeck, where Curtius was born, Sept. 2, 1814, still retained down to very recent times some portion of that independence which she had once possessed in much fuller measure as a leading member of the great Hanseatic Confederation. But her freedom had of course suffered grievous limitations during the seven years following the battle of Jena (1806 to 1813), and hard was the part which her *Syndikus*, Karl Georg Curtius, father of the historian, had to play during these difficult years. In fact he had once to submit to actual banishment at the decree of Napoleon. The Syndikus was himself a man of considerable classical culture, with some talent for poetry and of a devout religious character. Others of his sons besides Ernst (who was third in the list) achieved some degree of distinction.

The second son, Theodor, rose to be Senator, and eventually Burgomaster of his native city· and Georg, the fourth son, six years younger than Ernst, was as a philologist only less distinguished than his brother. Curtius passed his schooldays at the Catherineum, the High School of Lubeck, and there formed a romantic friendship with Emanuel Geibel, a lad of highly poetic temperament, whom he was to meet again in much altered circumstances during his residence in Greece.

It may well be supposed that the glorious Past of the great Hanseatic city, coupled with what he heard from his elders, of the perils and degradation through which she had so lately passed, had a powerful influence in turning the mind of the thoughtful and intensely patriotic boy towards the study of History. Nor, fortunately, were incitements to the study of Art altogether wanting. In the picturesque old city a school of artists, the best known of whom was the religious painter Overbeck, was already formed and found a social rallying-point in the hospitable house of the aesthetic Syndikus.

In 1833 Curtius went to the University of Bonn, where he made the acquaintance of the philosopher Brandis, an acquaintance which was destined powerfully to influence his career in life Here, too, he attended the lectures of Prof. Welcker, whose enthusiasm for the mystical side of the old Hellenic life made a deep impression on the young student. In the autumn of 1834 he migrated to Gottingen, where at that time the reigning influence was that of K. O. Muller, author of those two well-known books, *The Dorians* and *The History of Greek Literature*. Finally he completed his studies (in 1836) by a year at Berlin under August Boeckh, the author of *The Public Economy of Athens*, Müller's own teacher and at that time a kind of patriarch among the students of classical antiquity. This frequent passage from one university to another—it will be noticed that Curtius studied at three in the course of four years—may seem strange to an English scholar, but was entirely in accordance with the best traditions of higher education in Germany, which as we must always remember makes the University, not as with us the College, the student's intellectual home, but which also requires the men who aim at the highest position to study at more than one seat of learning, that they may, if possible, be acquainted with all that the foremost professors have taught in that department of science to which they devote their attention.

Of the three universities, Göttingen seems most to have corresponded to Curtius's ideal of academic life. Bonn was perhaps too

convivial. Berlin oppressed him by the sense of an unsympathizing multitude surrounding him and caring nought for students and their interests. Moreover the Court at that time was narrow and exclusive, and, as he hints, given to ignoble parsimony. At Gottingen he felt himself thoroughly at home, and he was filled with admiration for its foremost teacher, Karl Ottfried Muller.

'It is an unspeakable advantage,' he says, 'to have a long course of daily attendance on Muller's lectures, for as a teacher he is without a rival. The clearness of his explanations, the vivacity and charm of his delivery, the fullness and soundness of his learning, fascinates one every day more and more, and continually gives one fresh enthusiasm for that department of knowledge to which he by his exceptional mental endowments has given an altogether new life. Before him Philology had been burdened with a lot of dull dreary knowledge handed down from generation to generation, an incongruous mass of infinitely unimportant details. Our age, however, was not content to hand down this intellectual property with some trifling additions to future generations. It has begun to shape these scraps of knowledge and detached facts into a living and scientific Whole. It has aimed higher and sunk its wells of criticism deeper and of all the men to whom Historical Science owes this regeneration there is certainly none who has worked with so good success as Müller.'

This passage well expresses the object which such scholars as Curtius and his contemporaries, not only in Germany but in other countries, set before them and in large measure succeeded in accomplishing. Must it not be admitted that classical scholarship both in England and Germany at the end of the eighteenth century was in danger of becoming a dead, dull and unprofitable exercise of the human intellect? In Germany itself there was developed, during the nineteenth century, a certain divergence between two schools of classical scholarship, both sprung from one common ancestry in the lecture-room of F. A. Wolff. There were the *Sprachphilologen*, who might be said to carry forward the methods of our English Bentley, whose great champion was Gottfried Hermann of Leipzig, and who made the emendation of texts and the minutely critical study of language their chief aims. On the other hand the *Sachphilologen*, who might be considered the intellectual descendants of Scaliger and his French compeers, made the matter rather than the form of the classics the object of their study. Of this school the chief representatives, when Curtius was a young man, were Boeckh, Welcker, and K. O. Muller, and by all of these he was profoundly influenced. Without presuming to decide between the two rival schools or hinting depreciation of minute and accurate scholarship, we may venture to assert that the scholars of the mid-century who interpreted the literatures of Greece and Rome by the light of

Art, Philosophy, Religion, even Politics, breathed into the study of them a new savour of life, gave that study a right to claim a place in the education of the citizen, and—it is hardly too much to say—once more made 'the humanities' human. And among these liberalizers of classical studies we may fairly claim a high place not only for Muller, but for Muller's disciple Curtius.

During his residence at Berlin the young student was more and more turning his attention to the history of Classical Art. 'Berlin,' as he says, 'is a highly favoured spot for an archaeological student, and especially its collection of vases is beyond price.' We have a hint of one or more essays written on classical life as illustrated by such vase-pictures. But he was about to be brought into a closer connexion with Hellas and its history than could be won from any number of hours spent in a museum.

We have seen that, during his residence at Bonn, Curtius had been honoured by the friendship of C. A. Brandis, the renowned historian of Greek philosophy. To this professor a proposal was now made by the Greek Government that he should spend some years at Athens as a sort of literary adviser to the young King Otho and an informal Minister of Education. In accepting the flattering offer Brandis felt the necessity of providing for the education of his own family, and invited young Curtius, whose academic course he had watched with interest, to accompany him to Athens as tutor to his two sons Dietrich and Johann. It is interesting to note that one of these, the present Sir Dietrich Brandis, entered eventually the service of the British Crown, and has fulfilled an honourable career as Inspector-General of Forests to the Indian Government.

The proposal, cordially embraced by Curtius, formed the turning-point in his career. After paying some farewell visits to his friends, he joined the Brandis family at Frankfurt, and from thence on New Year's Day, 1837, they commenced the great migration. A long and solemn business that migration was, of some seven or eight Germans, men, women, and children, travelling across Europe in 'a mighty Post-omnibus,' and taking ten weeks in the journey. The coach, which had three rows of seats, was perhaps something like an old-fashioned diligence, and was fully packed within and without, so top-heavy in fact with luggage that it stuck in awkward fashion in the gateway of the White Lamb, at Augsburg. It was the depth of winter, and in toiling up the snow-covered mountain roads, the horses often seemed as if they would give up the too heavy task. But notwithstanding all the little inconveniences of the journey, it seems to have been throughout a merry and harmonious

party that rumbled through central Europe in the 'mighty Post-omnibus.' Besides his own special pupils there were two little boys who seem to have at once found their way to the young student's heart.

> 'Little Hans is just six years old An indescribably charming, fair-haired child, full of poetic fantasies If anything delights him he sings out his pleasure in simple, touching words, and everything delights him because all is so new and surprising It must be my sacred duty and joy to cherish this childlike disposition, and yet what can one give to a jolly little fellow like this in comparison with what one learns from him? To shew you what a devout little soul he has, fancy him after a big fire in Bonn writing a letter in good Latin characters "to the dear God," thanking him for having kept their house safe from the burning The youngest, a little three-year old, is a beautiful boy with very dark eyes and long shadowing eye-lashes. When I look at these lovely children, a fear often comes over me whether with their delicate frames they will stand the long journey and the change of climate.'

Notwithstanding these forebodings all seems to have gone well with the migrating family.

> 'Our coach,' he says, 'is very comfortable and runs so smoothly that one can easily read in it In the morning we regularly read a hymn and then a chapter of the Bible After that I take the boys in hand. they sit with me on the front seat, and I teach them all sorts of things, of course in a very free and easy way, so that at any interesting point of the journey lessons are broken off, and they are always easily exchanged for general conversation '

The family coach descended at last into Italy: there was a tedious week of quarantine at Verona, then a happy week of sight-seeing at Florence. Rome they decided that they must not visit, and at last by February 18, they reached Ancona, then the only Italian port in communication with Patras. Either they were detained there by contrary winds or they had an unusually long passage down the Adriatic, for it was not till March 4 that they touched at Patras. A sail of a day and a half brought them to Corinth, where they stayed for two or three days, twice ascending Acrocorinth, groaning over the discomforts of the modern city, but delighting in the remains of Grecian sculpture with which it teemed Putting their multifarious baggage on camels and pack-horses, they then pursued their leisurely way to Athens, which they seem to have reached on the third day after leaving Corinth.

So ended the ten weeks' journey. The whole *trajet* from Frankfurt to Athens could now be easily accomplished in five or at the most in six days. The migration of the family Brandis seems to belong to the same order of events as the departure of Abraham from Ur of the Chaldees, or the descent upon Italy of the waggons

which held the wives and daughters of Alaric and his Goths. Must we not draw the dividing line between Ancient and Modern History somewhere about the year 1840, which saw the general adoption of the railway system by the countries of Europe?

For the next four years (1837 to 1840) Curtius remained in Greece, during the greater part of the time as an inmate of the Brandis family, his relations with whom were always of the most friendly character. Their house was at first in the Acropolis itself, not then cleared of all modern habitations, but afterwards they lived in a house near the foot of Lycabettus. A yearly return to Germany was of course out of the question, and the visitors from the coasts of the Baltic had to bear the fierce heat of a Greek summer as best they might. During the first summer Curtius had a mild attack of fever, but after this he seems to have become thoroughly acclimatized, so that when his German friends came out to visit him, they found him well burnt and browned by the sun of Attica. Not without reason does he sing the praises of Cephissia, that charming summer resort of the Athenians at the foot of Pentelicus, 'full of shaded gardens, where air and water are of the finest, that renowned Attic clime, in which Herodes Atticus passed his fairest days.' But a more frequent place of summer holiday-making was Piraeus and its neighbourhood. Here the sea-breeze from the Saronic Gulf did something to temper the fierce heats of July and August. A practised swimmer, he imparted to his young pupils something of his own proficiency, so that, as he says in one of his letters,

> 'With my boys, now quite at home in the sea, we had a grand archaeological swimming tour in the harbour of Phalerum. There in that noble and lonely region [lonely now no longer] we spent a whole day hunting for traces of the old fortifications.'

The result of Curtius's investigations were given to the world after his return to Germany in a Latin treatise *de Portubus Athenarum*, the chief merit of which was that it definitely fixed the site of the fort of Munychia.

The house of Professor Brandis during the years of his residence in Athens was the centre of a delightful circle of earnest archaeologists. Chief among these were H. N. Ulrichs, Professor of Latin in the University of Athens, Ludwig Ross, Chief Curator of Antiquities in Athens, and the two architects, Schaubert and Hansen, who with Ross were charged with the superintendence of the excavations in the Acropolis. These excavations, during the years with which we are now dealing, seem to have been chiefly connected with the Erechtheum,

then presenting many difficult problems to archaeologists, and also with the area on the north side of the Parthenon, where one metope and three fairly preserved slabs from the frieze were discovered in the last year of Curtius's residence. It may well be imagined that in the late afternoons when his work as tutor was ended and the heat of the day was a little abated his steps generally turned towards the temple-crowned Acropolis. Some facts which have now become the commonplace of the handbooks then presented themselves to him and his fellow workers with all the delightful freshness of a newly-discovered truth. One such fact is the wonderful combination in the Parthenon of simplicity in the general effect with minuteness of attention to details. As he says—

'The more that he who contemplates the building as a whole is struck by its supreme simplicity and the perfect harmony of all its proportions, the more is he who examines it in detail struck by the elaborately artistic and most carefully thought out character of these same proportions'

He then goes on to describe the now well-known fact of the slight deviation from the perpendicular in each individual column which nevertheless possesses the effect of perfect perpendicularity in the structure as a whole.

It was during Curtius's stay in Athens that a very interesting bas-relief was discovered in Attica, which he thus describes:

'It is of more than life-size, in very flat relief but most carefully wrought It represents a warrior in profile standing upright with a spear in his hand and helmet with inserted guard (*dessen Bugel eingesetzt war*). The head, and in fact the whole figure, is in the stiff Aeginetan style. a little piece has been knocked off from the pointed beard, and the point of the lance is missing, otherwise the statue is in excellent preservation and shews traces of the most beautiful colouring'

As the reader has perhaps already conjectured, the writer is describing the well-known Stelè of Aristion.

Happy as were the relations of the Brandis household with one another and with their little circle of German friends, it was not all smooth sailing in their external affairs. They do not seem to have made many friends among the Athenian citizens, who after a long and exhausting war had not yet had time to develop a large literary class. King Otho and his young and clever queen, Amalia, were still fairly popular with their subjects, but the Bavarian *entourage* of the Court was much disliked. Curtius tells his parents that he always had to begin a conversation with the natives by saying 'We are not Bavaresi, and Bavaria is only a small part of Germany'; but even so his reception was not always cordial.

'It is a suspicious symptom that the inclination towards France and the alienation from Germany are so greatly on the increase The young people cannot be induced to learn German, whereas French is almost a second mother-tongue; and even English is a good deal spoken'

Of the condition of affairs both in the Greek Church and State Curtius, perhaps slightly biased by the unpopularity of his countrymen, draws a truly depressing picture The ecclesiastical synod was striving to establish a new hierarchy, telling scandalous lies about Luther and the Reformers, and imprisoning a man who was an earnest educationist and an old soldier of freedom in a monastery, because he had gently hinted that he was not quite sure of his belief in all the dogmas of the Eastern Church. Millions were being wasted in the building of the royal palace while the common people were in uttermost need, and the Greek capitalists were shamelessly embezzling the revenues of the State. Meanwhile the newspapers were continually attacking Brandis, whom they always spoke of as 'the German adventurer' He persuaded himself and perhaps he persuaded his friends that these attacks passed him by unheeded, but one may be allowed to conjecture that they had something to do with the early close of his Greek career In August, 1839, after only two years and a half of residence in Greece the Brandis family returned to Germany.

'He has had the great satisfaction,' wrote Curtius, 'almost entirely to complete the organization of the University in concert with the King God bless those dear ones The change is a very serious matter, but why trouble about it? In any event Brandis is lucky to have done for ever with the Greek cabinet and to be able to lead again the free life of a man of science. For the children too, the return to their home is a matter of great importance'

Curtius himself, who had now definitely taken up the study of Greek topography as the main pursuit of his life, remained in Greece for a year and a half after the departure of his friends. Encouraged by letters from his old Gottingen professor, K. O. Muller, he proposed to publish a comprehensive description of Greece, based on the great work of our countryman, Col. Leake, but somewhat condensed and thoroughly revised and corrected in the light of his own personal observation On the relative merits of English and German explorers Curtius made the following naive remarks in one of his letters to his parents.

'The provoking part of this kind of studies is that in pursuing them so much depends on external resources One often sees that important scientific questions would be susceptible of immediate solution if one could afford to visit remote spots, to hire a suitable retinue, to pay a staff of workmen, and so on. Englishmen have as a rule far fewer intellectual qualifications than Germans for seeing and describing foreign countries, but by the power of the purse they have become the founders of Greek topography However, there still remains

a fine unappropriated portion of the domain of human intelligence which is not to be bought for any quantity of guineas, and so there is left even for us Germans, though we be as poor as church-mice, a little sphere in which we can exhibit the results of our years of study'

With these objects in view Curtius, who had wisely made himself master of the Greek vernacular idiom and who was evidently not held too rigorously to his tutorial duties by his friendly employer, had already made two or three journeys of some importance In the very first year of his sojourn in Greece he had the great advantage of making a tour in Peloponnesus with the geographer Karl Ritter, whose helpful influence may be distinctly traced in some passages of Curtius's later work on Peloponnesus. Next year he again travelled in the Morea with Count Baudissin, translator of Shakespeare, and a Mexican architect named Fuente. These journeys were described in extremely voluminous letters to his parents at Lubeck, which no doubt served and were meant to serve as the groundwork for his later published treatises. They are not, however, entirely taken up with archaeological and architectural details Here, for instance, is a pleasant picture of his visit to Messenian Calamata, which Curtius considered the most charming spot in the whole of Peloponnesus

'I went at once to the post-office to inquire for a letter which I expected from Frau Brandis I found a good old greybeard walking up and down in the garden surrounding the house, smoking a long pipe, which he offered to me "Yes there was a letter for me, and if I could come back in half an hour he would have found it for me by that time and I should be introduced to his family." I returned and found the mother in the room with her children, a young Alexander and a very lovely daughter named Theano My letter lay on the table covered by a nosegay As soon as I had read it and was satisfied that all was well, I looked about me in the well-lighted room full of sweet scents from the surrounding garden I was greeted as an old and long-expected friend The mother talked to me of bye-gone happier times, ere Ibrahim Pasha came and laid everything waste But the children with a joy that touched my heart talked of the happy future of their country, which they saw all in a rosy light illumined by the glory of its ancient heroes As we sat there in a lovely bower in the garden I had to tell them all about Athens, about its temples and its colonnades, about the Pnyx and about all the glories of Greece that I had seen How those young faces glowed, as they sat and listened, wanting always something more, and then told me what they had themselves read of their country's history The black-eyed Theano especially wanted to tell me all the adventures of the old Messenian chief Aristomenes It was perfectly delightful but the sun was already climbing above the orange-trees: I knew that my companions were waiting for me, and I had to take leave with a heavy heart. Only those who know how rare is such innocent simplicity among the Greeks, and how delightful it is when you do meet with it, can imagine my rapture in the company of these child-like souls'

In the course of his Peloponnesian travels Curtius visited Olympia, where French explorers had already made some excavations, but, as

he said, 'there is now little for the traveller to do at Olympia,' and he rode on without presentiment of what that river-traversed plain would one day do for his renown. He was always much attracted by the islands of the Archipelago, whose inhabitants seemed to him to be of a nobler and purer type than those of the mainland and whose churches, as having escaped the destruction wrought by Ibrahim's troops, were of far greater archaeological interest. Thus it came to pass that in September, 1839, he paid a visit to the Cyclades, especially to Paros and Naxos, in company with his old friend Geibel, who had been for some time living at Athens in a similar capacity to that of Curtius himself. Geibel's lot however had fallen to him in far less pleasant places than his friend's, for his employer, the Russian Ambassador, seems to have kept him at a respectful distance and his pupils bravely resisted his attempts to teach them anything. All the more delightful was the holiday in the Cyclades for the worried tutor whose poetic temperament sensibly affected the mind of his companion. The long letters from Naxos written by Curtius to his parents have rather more of poetry and romance and less of mere archaeology than the rest of his correspondence. He was for a time visibly attracted by the atmosphere of mediaeval romance which hangs round some of these little fragments of the great perished Latin Empire in the Levant, and his verses addressed to the Boy of Naxos lamenting the fallen fortunes of a peasant lad descended from the once powerful dukes of that island, have the true ring of romantic poetry. One almost ventures to say that the German student has caught a truer inspiration from 'the Isles of Greece' than the far more famous English poet who peopled them with misanthropic pirate-chiefs, the reflexions of his own moody personality.

In April, 1840, an event happened to which the young student had for some time looked forward with eager anticipation. The great Karl Ottfried Muller arrived, to survey for himself under the guidance of his former pupil the land about which he had been writing for half a lifetime, to copy inscriptions and to excavate temples. He brought with him a young companion, G. A. Schill (afterwards Professor of the History of Art in the University of Berlin), and with him Curtius, who was evidently a little over-awed and sometimes overborne by the strong will of his much revered teacher, at once formed a cordial friendship. Müller plunged immediately with eager zeal into all the burning questions of Athenian archaeology, spent long days on the Acropolis, watching the excavations then proceeding on the north side of the Parthenon and with untired

energy discussing with the students who gathered round him point after point of the antiquities of Athens. As the year wore on and the days grew hotter, young Curtius ventured to hint that Muller was working too hard, that he should at least allow himself the noon-tide repose which all dwellers in the lands of the South find necessary for health. 'No! no siesta for me,' he seems to have said. 'My brain is as strong as iron. I need not cover my head for fear of sun-stroke. And all this spring the weather has been cold and damp. Your sun of Attica is not half so terrible as he is described.' So the party set forth from Athens early in May, and for six weeks travelled backwards and forwards across Peloponnesus, of which they sought to explore every corner. The journey at that time of year would be considered a hard one even now with all the improvements—such as they are—which sixty years have brought to benefit the Grecian traveller and at that time to spend long hot days riding over rugged mountain-passes and resting or trying to rest at night in vermin-haunted khans was felt to be rough work even by the well-seasoned Curtius, and was evidently most unwise for the sedentary Göttingen professor

For ten days the party rested in Athens: then in the beginning of July they started under a burning sun for Delphi, a place which on account of its connexion with the Dorians, had special attractions for the author of the history of that people. Here for some days they worked, digging, measuring, copying inscriptions of which they were reaping an abundant harvest. Soon, however, several of the party showed symptoms of fever, probably contracted in traversing the marshy region of Lake Copais; and Muller himself, who had lain for hours in a cramped and uncomfortable position copying an important inscription, displayed such evident signs of serious indisposition that the party decided on an immediate return to Athens, and sent word for an Athenian doctor to meet them at the frontier of Attica. Sometimes Muller's strength a little revived, and then again for a whole day he had to be supported on his horse by a friend on either side of him, and at night he was sometimes delirious, declaring that he saw an inscription and must go forth to copy it. Eventually the party reached Athens, but the fever was strong upon him and he was unconscious when they arrived. He died on August 1, in the forty-third year of his age. A monument has been erected to him on the rocky hill of Colonus, where it is now joined by another monument erected to the French scholar Lenormant, who, like him, died at Athens in the midst of his archaeological labours. Excellent as the work was which Müller had done for

classical literature he must be said to have perished in his prime, and might have had years of good work before him if he had shown ordinary prudence in his journey to Greece. There was, however, as his contemporaries remarked, a sort of poetic fitness in the place and manner of his death, seeing that it was in the high mountain sanctuary of his own beloved Dorians that he fell smitten by the rays of the Far-darting Apollo.

With Muller's death all motives for further prolonging Curtius's stay in Greece disappeared. He left Athens in December, 1840, and after a tedious quarantine at Ancona, a residence of a couple of months in Rome, where he had a touch of Roman fever ('the shiver which ran through me in the galleries of the Vatican was not a thrill of admiration for the glories of art, but the first touch of the fever-god'), and then a short stay at Venice and a very leisurely northward journey, he returned at last at the end of May to his home at Lubeck, from which he had been absent four years and a half. Greatly as he had gained in thought and culture by these years of travel, it seemed at first as if he had injured his worldly prospects by his acceptance of the invitation of Brandis. He had not even finished his university course when he returned, an undergraduate of twenty-seven, to Germany. That however was soon set right: for on December 22, 1841, he took his doctor's degree at the University of Halle with distinguished success, his Doctoral thesis being the before-mentioned treatise *de Portubus Athenarum*. That done however, no door to honourable or profitable employment seemed to open before him. He must perforce accept a situation as teacher in the High School (Gymnasium) of Joachimsthal in Berlin under the headship of Professor Meincke. The drudgery of a schoolmaster's life, however, was not to his taste, though he ever after considered that his year of office at Joachimsthal had been of use to him as a lecturer, since the absolute necessity of getting and keeping the attention of a class of restless boys had forced him to adopt a style different from that soporific presentation of the contents of a note-book which too often characterized the lectures of an eminent professor.

In May, 1843, he settled down as a *Privat-Docent* in the University of Berlin, fully aware of the long years of weary waiting which often fall to the lot of the *Privat-Docent* ere he can attain to the ease and comfort of a Professor's chair, but also feeling that in his vivid and pictorial conceptions of Greek history and Greek art he had a treasure not possessed by all, perhaps not by any of his competitors. He felt sure that his opportunity would one day come, and mean-

while as he said, 'What an inexpressible charm there is in forming a circle for oneself, in shaping out one's own sphere of activity!'

The opportunity came early in 1844, and it came in connexion with a movement at which Curtius himself had once been inclined to smile This was the *Lecture-Union* founded by the indefatigable historical student Friedrich von Raumer. This organization, somewhat resembling our own University Extension Lectures, aimed at popularizing the study of science, both physical and moral, and inducing the learned men who abounded in Berlin, the high Brahminical caste of Professors and Private Tutors, to impart to the ordinary citizens of Berlin, to the men and women who had no pretensions to special culture or deep learning, as much as they could communicate of the intellectual stores resulting from their own labour. At this descent from the high places of academic exclusiveness some of the Professor's colleagues shrugged the shoulder of scorn. Savigny said that it seemed to him that the lectures would be 'an oral Penny-Magazine' (a sneer perhaps fully intelligible only by those whose childhood was passed in the thirties and early forties of last century); but in spite of such sneers the movement went forward, and the lectures delivered in the great hall of the Singing-School of Berlin, and dealing with a wide variety of subjects, from the Mammalia of South Africa to the Potentialities of the Philosopher Schelling, did, whether fully comprehended or not, lay hold of the great unacademic public and became the common talk of Berlin.

Curtius was invited to be one of the lecturers, and chose for his subject the Acropolis of Athens. He wrote to his brother

'Yesterday Encke lectured on the Universe a wonderful lecture,—all pure gold. A week ago Raumer gave a discourse on the Maid of Orleans, extremely interesting for any one to whom the recently discovered notes of the trial were unknown Next Saturday, at 10 minutes past 5, unhappy I shall be standing on the platform, opposite the Royal Family of Prussia, in a brilliant assemblage of 950 persons My heart will thump a bit, but let us hope that all will go well.'

All did go magnificently well. We hear from an enthusiastic fellow-citizen of Curtius how, no doubt on account of the presence of Royalty, all the rank and fashion of Berlin crowded into the Singing-School, how the slight finely-featured man stood apparently unmoved before the brilliant throng, 'his usual wild disorder of hair now combed into exceptional neatness, and his neckcloth and gloves of dazzling whiteness.' At a sign from the Royal box the lecturer began. His enthusiasm, his deep interest in the subject, carried all before him. The superfine aristocracy of Berlin forgot to chatter

and all listened with breathless attention as the lecturer, breaking away from the fetters of his manuscript, in a gush of extemporaneous oratory described the glories of the city on the hill, the Erechtheum, the Parthenon, the Statue of Minerva, and finally drew before his enraptured audience a picture of the great Panathenaic procession winding up the height and moving into the Cella of the Virgin's Temple.

The lecture closed amid enthusiastic plaudits. Old generals came forward to grasp the young lecturer's hand. great ladies stepped up to the platform and begged him to print his discourse. Most important fact of all, the Princess Augusta, wife of the heir to the throne, and grand-daughter of Goethe's Grand-duke of Weimar, beckoned to Professor Lachmann and asked for all the particulars that he could give her as to the character and past career of 'this most interesting young man.'

All this description comes from the pen of his friend. Curtius himself modestly says

> 'The success of my lecture has surpassed my expectation I have set all Berlin on fire for the Acropolis, and I am only blamed for one thing, that in my final reverence I did not bow deeply enough towards the Royal box. People thought they saw in this the stiff-necked republican of Lubeck.'

The intercourse with the Court for which the way was opened by this lecture and the introduction to Princess Augusta which followed it, led in a few months to Curtius's appointment as tutor to the young prince Frederick William (afterwards Emperor Frederick III). The duties of this important post occupied him for the next six years of his life (August, 1844, to March, 1850) and left him but little time for literary work. They were however years full of interest, and the influence exerted by the pure and noble character of the tutor on the still impressionable mind of his pupil was without doubt fraught with blessing for Germany, and had the reign of the Emperor Frederick III not been prematurely cut short by disease, might have changed for the better the future of all Europe. When the young prince first made the acquaintance of his tutor, he seems to have been, though amiable and healthy-natured, somewhat lacking in independence of character and too listless in the acquisition of knowledge. Curtius succeeded in firing him with some of his own enthusiasm for Greece, for history, for all that is beautiful in art and in human life. At the same time, knowing what high destinies awaited his pupil, he never aimed at making him a mere student or a mere dilettante He kept ever before him the necessity of striving after a high ideal of courage, loyalty, and truth: and

in all these things he appealed to that sanction which religion gives and by which his own life was consistently governed. An anecdote which Curtius himself related to a friend of my own, but which has not, it is believed, found its way into any of the memoirs, may be quoted to illustrate this relation between teacher and pupil. Years after the daily intercourse between them had ceased, when the Crown Prince had reached middle life, he was on a visit to a foreign Court when circumstances occurred which rendered it necessary for him either to make a protest—a most difficult and painful protest—on behalf of decency and morality, or to seem himself indifferent to their claims. He made his protest modestly but firmly, and it succeeded. The letter describing the event reached Berlin at a time when Curtius happened to be in the Royal presence. As he narrated the occurrence 'Da legte Seine Majestat die Hand auf meine Schulter und sagte: "*Das* hat mein Sohn von Ihnen, Curtius!"'

The years of Curtius's engagement as tutor were not easy ones for the family of his pupil. In March, 1848, the revolution broke out at Berlin, the troops fired on the people; Frederick William IV, wavering between divine right and popular sovereignty, humbled himself in apologies to the citizens of Berlin; his brother the Prince of Prussia, afterwards the adored Emperor William, being suspected of a leaning towards absolutism, had to bow for a while to the storm, and take refuge at the house of the German Ambassador in London. Over the façade of his palace in Berlin appeared the ominous words 'National Property.' His wife, his son and their diminished household, including Curtius, spent some months in complete retirement in the country. In June, however, the tide began to turn. The Prince of Prussia came back with these memorable words on his lips, 'It is impossible for men to be freer than they are in England, but *there* the highest respect for the law reigns, and so must it be with us, and all must join together to work for this lawful freedom.' In 1849 the revolutionary waves were still heaving; but in March, 1850, when Curtius took leave of his pupil at the University of Bonn, the cause of monarchy was generally triumphant throughout Europe, and Germany had settled down again nearly on the old lines. The effect of all these disturbances on Curtius's own mind was, as he says, to make him a more decided Royalist than ever. An English reader of his letters will perhaps think that he looks at matters too exclusively from the point of view of his royal patrons, and will wish that there were a more generous recognition of the real value of the popular claims, disfigured and caricatured as they were by the excesses of

the Berlin mob, but it cannot be doubted that his hearty sympathy with the parents of his pupil in those dark days of banishment and distress, greatly strengthened the tie which bound them to one another.

Returning to Berlin, Curtius resumed the ordinary career of a *Privat-Docent* and *Professor Extraordinarius*. He was now able to increase in a satisfactory manner his literary output. In the years 1851 and 1852 appeared the two volumes of his *Peloponnesus*, in some respects his most important contribution to the study of the life of ancient Greece. He was working also during these and following years at the editing of the last volume of the *Corpus Inscriptionum Graecarum*, a heavy and somewhat uncongenial task, which had however the result of procuring for him admission to the well-guarded circle of the Berlin Academy of Sciences.

The Professor's popular lectures on Ancient Greece were now a sort of recognized yearly festival in Berlin. None attracted more attention than one which he delivered in January, 1852, on Olympia, strongly urging the resumption of excavations on that important site which had been practically abandoned for two generations. This lecture was received with almost as much enthusiasm as that on the Acropolis King Frederick William IV was one of the audience, and on leaving the hall said to his friend and chief scientific adviser Humboldt, 'Now I must go round with the begging-box, and collect money for the excavations.' This enthusiasm, however, like many others of the kind-hearted but visionary sovereign, soon died away. There was no energy now for adventurous schemes of any kind in Prussia, which, hopeless and spiritless, was being dragged along in the wake of Russia through the rough seas of the Crimean war. Then, ere long, came the king's mental malady and the regency of his brother. During these years, from 1853 to 1861, Prussia was in 'the doldrums,' and had neither money nor enthusiasm to spare for scientific research.

During this period, however, Curtius began to experience in a new capacity the joys and sorrows of family life. He married in March, 1850, Augusta Bessel, widow of his friend Bessel the publisher. She died after a married life of little more than a year, leaving him with one infant son In 1853 he married again, his second wife being his sister-in-law Clara Reichhelm, by whom he had a daughter, who married the son of the great Egyptologist, Lepsius. In January, 1856, news came to Berlin of the death of Karl Friedrich Hermann [1]. His chair at the University of Gottingen

[1] Not to be confused with the older and more renowned Gottfried Hermann of Leipzig, who had died eight years before at the age of seventy-six.

was almost immediately offered to Curtius with a salary near six times as large as the meagre stipend which had been paid him in Berlin. In addition to this there was the great attraction of succeeding to a post which had been held by Heyne, by his own honoured teacher and friend K. O. Muller, and lastly by K F. Hermann The offer was gladly accepted, and the next twelve years of Curtius's life (1856-68) were spent at the *Georgia-Augusta* University of Gottingen. These years were not the least happy, nor the least fruitful period of his life. There was at that time a group of eminent men such as Lotze, Ewald, Wieseler, Waitz, and Sauppe among the Professors at Gottingen, and for them, but also most emphatically for the younger teachers and for the students at the University, Curtius's table, presided over by his wife, a lady of singular social charm, was a favourite rallying point

The chief literary fruit of the Gottingen period was the *History of Greece*, the work by which the author is best known to the general public. In 1852 the great bookselling firm of Weidmann, who were publishing Mommsen's *History of Rome*, approached the author of *Peloponnesus* with a proposal that he should undertake a similar work on Greek history. He did not refuse, but it was not till 1855 that he was fairly launched upon the voyage, which afterwards the serene academic air of Gottingen made so prosperous. The *Geschichte Griechenlands* was published in three volumes, which appeared at intervals from 1857 to 1867. Obtaining at once a large circle of readers, the book has since gone through five or more editions, and has been translated into various languages. It is satisfactory to remember that our own country was the first to extend to it this hospitable greeting. The first volume of this excellent translation by our colleague, Professor A. W. Ward, appeared in 1870, some years before the Italian or the French reproduction of the *Geschichte Griechenlands*.

The *History of Greece* had, like Macaulay's *History of England*, to pay the penalty of its wide popularity by undergoing some severe criticisms at the hands of the experts in philology The author's letters show that he was not altogether insensible to the criticisms of his brother professors.

'While some,' he said, 'clasp my hand and thank me for the pleasure which I have given them, others are critical and shrug their shoulders I am beginning happily to grow thick-skinned about this The great point for me is that the book *goes*, but I must also say that I do not think actual errors have been pointed out on a single page, and if, as many of my friends tell me, they cannot on this or that point accept my views, there is always the possibility that what seems strange to them at first—I allude especially to my representation of

the influence of Delphi—may gradually win its way, and that they may come to see it as I do Anyhow, I will with God's help push on vigorously, and do my day's work to the best of my power' (p 524)

Again, later on in life he says:

'I am deeply grateful for the success of my History, which consoles me for the fact that the professed *savants* turn up their noses at it and pass it by with scorn. For the good German *Gelehrte* hints his distrust if a book is readable, and if he does not see the drops of sweat on the author's brow I am very conscious in myself that I have spared no pains in writing it, but I have always thought it a worthy aim to keep my labour in the background The result is a work which people of real culture can read from beginning to end without weariness This ever-recurring chasm between "the learned" and "the laity" is a bad bit of barbarism' (p. 661).

The present writer does not venture to pronounce an opinion as to the abiding merits of Curtius's History Any one can feel its charm, can perceive in some measure the skill with which the author, who was before all things poet, has reproduced the impressions which the land, the art, the religion of the Greeks have made upon his poet-soul. As Prof. Bury has said, 'The new note which Ernst Curtius introduced into the study of Greek History is that which might be described as *geographical vividness*.' None of the previous historians of Greece had visited the country: he had, and its mountains and plains, its deep gulfs and long winding shores were ever before his eyes while he wrote So, too, with its statues and its temples. He was fascinated by the beautiful forms in which Greek artists embodied their conceptions of glorified humanity, and his own deeply religious nature longed to find out the points of contact between his and their thoughts concerning the Invisible.

On the other hand it seems to be admitted that Curtius is not strong in purely philological work, and that his lack of practical experience of political life prevents him from having a firm grasp of the principles of constitutional development in the states of antiquity. Here a tempting contrast suggests itself with the work of the man whom he calls 'the dry banker Grote,' but I must not allow myself the luxury of such a digression.

Since the publication of the first edition of Curtius's book all our thoughts concerning the early history of Greece have been profoundly modified by the discoveries of Schliemann and his followers. It would be unreasonable to expect that the author's pictures of events in prehistoric Tiryns and Mycenae should correspond with that which we now know concerning life in those centres of a pre-Homeric civilization, but on the whole it will probably be

agreed that the general soundness of Curtius's method is shown by the fact that he suffers less than some of his competitors by these additions to our knowledge. In particular he seems to have discerned with much sagacity the important part played by the rulers of Crete in the earliest dawn-age of Greek civilization[1]. The way too in which his glance is ever turned towards the East, the stress which he lays on Assyria, Egypt, and Phoenicia as factors in the development of the life of Hellas, are things common to Curtius with our newest school of investigators.

The twelve years during which Curtius was peacefully lecturing at Gottingen were fateful years for Germany. Frederick William IV died his brother succeeded him. at Bismarck's urging he defied his Parliament and remodelled the Prussian army at his will the Schleswig-Holstein question awoke from its uneasy slumber Austria and Prussia in alliance crushed Denmark they quarrelled, as Bismarck had probably intended that they should quarrel, over the division of the spoil: in 1866 the so-called Six Weeks' war broke out, Austria with her allies Saxony, Hanover and Bavaria was defeated: Hanover, Cassel, and many fair cities of North Germany were incorporated in the Prussian monarchy. During these later events the position of Curtius was a painful one. Himself the salaried servant of the House of Hanover, he nevertheless continued 'true Prussian' at heart, and kept up a correspondence of cordial friendship with his former pupil, now Crown Prince of Prussia. One of the most interesting and certainly the most beautiful of the many letters from Frederick William which are published in the life of Curtius is that in which the Crown Prince describes his conflict of emotions between the loss of a darling child, the little prince Sigismund, and the necessity of going forth straight from the little grave to fight and overcome at Koniggratz. From the uncomfortable position in which he found himself at Gottingen after the annexation of Hanover by Prussia, Curtius was soon delivered by an invitation to return to the University of Berlin. In May, 1867, Gerhard, the founder of the Archaeological Institute, the Professor of Archaeology in the University and the Director of the Museum, died. The Professorship, and a prominent place in the Museum, which eventually was exchanged for the actual directorship, were offered to Curtius and gladly accepted by him. He rightly attached great importance to his official connexion with

[1] Whereas Grote says (I 19) 'That the Cretans were ever united under one government or ever exercised maritime dominion over the Aegean, this is a fact which we are not able either to affirm or to deny.'

the Museum and regarded himself as a link between that Institution and the University. In truth he had now found the most fitting sphere for his genius. He was always more interested in archaeology than in philology, in the excavation or description of temples than in the discussion of texts: and in the Museum, surrounded by his beloved statues and models and maps of buried cities, he happily passed the remainder of his days.

One advantage of his new position was that it brought Curtius once more into direct official connexion with his old pupil the Crown Prince, who was the recognized 'Protector' of the Museum. Of this connexion and of his undiminished influence with the heir to the crown he made a noble use, not for any private ambitions of his own but in order to attain two public objects both of which were very near to his heart, (1) the foundation of a German Institute for the study of Archaeology at Athens, and (2) the excavation of Olympia. The first, though very important, was the easier work of the two He jokingly says in a letter written April 15, 1872, 'The modern mania for founding new institutions has so infected me that I am devoting all my energies to a scheme for establishing an Archaeological Institute in Athens,' and in March, 1873, he reports the cordial acceptance of his scheme. The example of Germany in thus providing for the education of her young archaeologists in the very home of the noblest art that the world has ever seen, has since been followed, as every one knows, by England, by the United States, and by Austria, and the happiest results for archaeological science have followed from their friendly rivalry[1].

To enlist the sympathies of the Court and the nation on behalf of the scheme for the excavation of Olympia was a harder matter. Mindful of the heavy losses which their country had sustained in past times by the removal of its artistic treasures, the Greek Government had come to a firm resolution not to allow any excavations which were undertaken with a view to the exportation of the objects thus discovered. This seemed to close the door against Olympia's exploration. If the Museum at Berlin might have hoped to be enriched by the work, as it was being enriched in an extraordinary manner by the wonderful discoveries at Pergamum, whose trophies the Turkish Government allowed the Germans to carry away with them, then no doubt the money would have been freely forthcoming. but an excavation for purely scientific purposes, an excavation which would not enrich the Berlin collection by a single

[1] The foundation of the French school of Archaeology at Athens preceded by several years that of the German Institute.

statue—that was a very altruistic scheme to propose to the countrymen of Bismarck. However, such was the project which Curtius ventured to bring before the Prussian Government. On April 4, 1870, he writes,

'The affair of Olympia has pursued its adventurous way through all the Ministries to the king himself, and soon it will be decided whether an undertaking of so idealist a character as the opening out of the site of a temple without any ulterior objects of a selfish kind can be carried through or not. I hope it is now a question of time, and only of a few months' time'

The project however required a longer time for its acceptance than its sanguine author had allowed. Within four months after the date of the above letter the German cannon were thundering on the French frontier, and William of Prussia, soon to become Emperor of Germany, had other things to think about than the exploration of Greek temples. However, when peace came Curtius renewed his application possibly the French *milliards* received by the conquerors made consent more easy, and though the affair took some time and Bismarck never smiled upon the plan, the cordial support of the Crown Prince at length ensured the triumph of his friend. At Easter, 1874, we find Curtius at Athens negotiating with the Greek Prime Minister, Delyannis, for leave to begin excavations at Olympia on condition that nothing discovered should be removed out of the country, but that all should be deposited either at Athens or in a Museum to be formed at Olympia itself. For this object the German Reichstag voted a first credit of £8,000—they eventually spent £40,000—but strange to say the hesitation to close the bargain came not from Germany but from Greece. As Prof. Diehl has said:

'The Archaeological Society of Athens protested the Chamber and public opinion were alike distrustful. Nobody would believe that the enterprise, pursued solely in the interests of science, would not add a morsel of marble to the collections at Berlin: as late as 1876, a year after the beginning of the excavation, a highly placed Greek personage discreetly congratulated a German *savant* on the extraordinary skill with which his countrymen were smuggling out of Greece the marbles of Olympia.'

I need hardly say that such suspicions were altogether unfounded The lovely Hermes of Praxiteles, the interesting archaic groups of sculpture from the pediments of the temple of Olympian Zeus, a charming head of Aphrodite in Parian marble, these and all the other statues found in the course of the excavations (except such duplicates as by the terms of the agreement the explorers had the right to retain) are in the Museum at Olympia, which is guarded by the bust of its spiritual founder, the bronzes are in the Museum

at Athens: the German Empire has only a very scanty material to show for that large expenditure of money, nothing but the glory of having recovered for the world of science the exact proportions of the renowned temple of Zeus, the workshop in which Phidias wrought at his glorious statue of the Father of gods and men, the treasuries of the various Greek states, the pedestals which once bore the statues of Zeus erected out of fines paid by competitors who had fought unfairly, the lines of the great Stadium, scene of so many victories, and of so many heart-breaking defeats. All these and countless other details which enable us to reconstruct in imagination the *Panegyris* which was the one cherished focus of all Hellenic life, the persistent importunity of Curtius, the loyalty of his pupil and friend, and the wise liberality of the first generation of the statesmen of the German Empire have recovered for the world Surely they have done a noble work, though the Berlin Museum may have little to show for their outlay.

Nor does this statement sum up the debt which classical Archaeology owes to Ernst Curtius and his royal friends. Inspired by their example, the French Republic concluded with the Greek Government a similar self-denying convention, giving them power to excavate at their own costs that other site which vied with Olympia in sanctity and renown, the temple of Apollo at Delphi. The French Chamber voted for the purpose a credit of £20,000, and no one who has seen the extensive operations carried on by the Director, M. Homolle, under the shadow of Parnassus, will be surprised to hear that that credit has been largely exceeded. Two years ago, the excavated site, the museum, and all its contents, rivalling those of Olympia in interest, were handed over by the French Minister of Education to the Greek Government.

In this noble form of international competition our own country has officially taken no share. Much has been done at their own expense by private individuals, especially in connexion with the excavations in Crete, but Great Britain as a state has, I fear, done little or nothing towards unveiling the hidden mysteries of Hellas.

The German excavations at Olympia occupied five years, from 1875 to 1880. The work was a very heavy one owing to the incursion of the river Kladeus, which in the course of centuries has covered the sacred site with layers of sand twelve to fifteen feet deep. On the other hand, as Curtius remarked in one of his letters, this was not entirely to be regretted, since the kindly violence of the stream had covered the treasures of art from the covetous eyes of the peasants, who would otherwise have burnt all the marble

into lime. Though now advanced in years he spared himself no hardship or fatigue in the service of his favourite science He had already made one journey to Athens, in order to inspect the excavations on the Acropolis, and another to Asia Minor to ascertain what Schliemann was doing at Troy, and Wood at Ephesus, and to advise Conze about the German Government's operations at Pergamum. He now made three successive journeys to Olympia, to encourage the workers by his presence, and to examine the monuments which they had uncovered. The results, though less striking than those obtained by the wealthy and enthusiastic Schliemann, abundantly rewarded him for his years of effort over this enterprise. As he said, in reviewing the work near its close, 'My young helpers have all fully performed their duty, and we can with justifiable pride view that which has been accomplished. All intelligent observers the world over, have recognized it as a work that does honour to the German people, and lets in new light on all sorts of questions. I myself in my daily contact with the antiquities of Olympia have learned much and gained many fresh ideas. In the silence of my own heart I am deeply thankful for the success of this work, and know that a rich blessing rests upon it which will make itself yet more manifest in years to come.'

When the excavations of Olympia were ended, the *Hauptwerk* of Curtius, the main interest of his life, had come to a close, except—and it is a large exception—for the labour still required in order to bring the results of the excavations in an adequate manner before the world. At this, and at his lectures at the University, and his demonstrations in the Museum, he still toiled bravely on into the ninth decade of his life. Death was busy in the ranks of his friends. In 1888 (the *Drei-Kaiser-Jahr*, as the Germans call it) he lost both his old patron, the Emperor William, and his dearly loved pupil the Emperor Frederick. Two years before this his younger brother Georg, Professor of Philology at Leipzig, his dearest friend and most constant correspondent, had preceded him to the tomb. About the same time he lost through death the companionship of his colleague and kinsman Lepsius, the Egyptologist, and of his boyhood's friend the poet Geibel. Though he still at eighty retained much of the freshness and even of the bodily activity of youth, he had warnings that the day of work was drawing to a close. He had to undergo two operations for cataract, and was forced to spare his eyes by not studying except in daylight. Two severe accidents, the result of collisions in the streets of Berlin, probably gave a shock to his system from which it never wholly recovered. In December,

1895, he was attacked by renal disease, and after six months of pain and weariness patiently endured, he died on July 11, 1896

The object of this address has been to describe only the archaeological side of Ernst Curtius's career. I must therefore not attempt to bring before you the ethical aspects of a singularly pure and noble life, his ardent patriotism, his loyalty to his friends, his beautiful family life, the strong and simple faith in God, which was his ruling principle from boyhood to old age.

Two great nations, Germany and Great Britain, have for some years past been perseveringly showing to one another the least attractive side of their respective characters. Yet the generation of idealists like Ernst Curtius is not extinct in either nation, and I venture to say that to them, to the idealists in the widest sense of the word, not to the hard egotistic materialists, belongs the future of our race. These are the men, engaged as a Frenchman would say in the pursuit of 'le vrai, le beau et le bien,' who help us to understand what is noblest in our own character and in the character of the nations round us.

Perhaps it may not be amiss to remind ourselves of the existence of such an Idealist German as Ernst Curtius, whom certainly no man could accuse of that arrogant egotism which it is the fashion to attribute to his countrymen.

NEUTRAL DUTIES IN A MARITIME WAR, AS ILLUSTRATED BY RECENT EVENTS.

BY

THOMAS ERSKINE HOLLAND, K.C., D.C L.

FELLOW OF THE ACADEMY

Read April 12, 1905.

AMONG the pious wishes (*vœux*) recorded in the final act of the Hague Conference of 1889, was one to the following effect —

"The Conference desires that the question of the rights and the duties of neutrals may be entered on the programme of a Conference to be called at an early date"

There is probably no reason to regret that the Conference in question has not yet taken place. The department of International Law indicated in the Hague resolution, is, no doubt, that which, more than any other, needs re-examination and re-statement, but the discussion of the subject cannot fail to gain much in actuality from the illustrations of its problems which have been afforded by the events of the war now in progress The proposed Conference, like that recently suggested by President Roosevelt, which, as appears from Mr. Hay's circular of invitation, would also have occupied itself mainly with the Law of Neutrality, must stand over till the war has been brought to a conclusion. In the meantime, however, something may probably be done by private effort to prepare the way for responsible diplomatic action.

This is, at any rate, the opinion of our President; in obedience to whose request I accordingly venture to ask the attention of the Academy to such of the rules of International Law as affect the

duties of neutrals, with reference to a war carried on upon the sea I shall test the sufficiency of these rules by their application to recent occurrences, but shall consider the several topics with which we shall have to deal in accordance, not with the accidental order in which our attention has been directed to them by those occurrences, but rather (as is fitting in addressing a learned body) with what appears to me to be a scientific distribution of the subject. It will, I think, conduce to clearness of thought if we treat the obligations of a neutral State (International Law has, of course, nothing to do with the obligations of individuals) as being of three classes, involving respectively ABSTENTION, PREVENTION, and ACQUIESCENCE

I. The first of these is of a negative character. It consists of restrictions upon the free action of the neutral State, by which it is, for instance, bound not to supply armed forces to a belligerent, not to grant passage to such forces; and not to sell to him ships or munitions of war, even when the sale takes place in the ordinary course of getting rid of superfluous or obsolete equipment

Duties of this class are now so well established that the present war has afforded no clear instance of their being disregarded. If it was ever intended that the Pacific Fleet should pass through the Baltic Canal, there is no reason to suppose that this would have been allowed by the German Government. The free passage of even belligerent war-ships through the Suez Canal is of course specially guaranteed by the Convention of 1888. The rumours persistently circulated that some neutral Government, e. g Chili, was on the point of selling its fleet to one or other of the belligerents have always proved to be baseless In January of the present year the Chilian Congress is reported to have refused to accept a very high price offered by an American firm for six war-ships, doubtless believing that the ships were destined for either Russia or Japan. A new, though cognate, question has, however, been raised by the sale of certain German liners to Russia, which forthwith, after rechristening, commissioned them as armed cruisers. If these vessels were, as is alleged, subsidized by their own Government, with a view to their employment by that Government in case of need, it has been urged with much force that they practically form part of the reserve of the Imperial German Navy, and that, therefore, Germany being neutral, they could not be lawfully sold to a belligerent [1].

[1] It would seem that the opinion of the Law Officers to which Mr Balfour alluded in August, 1904, was not given with reference to precisely the facts above stated.

One can hardly admit into this class of neutral obligation a duty not to rescue drowning crews of a belligerent war-ship. The question was raised with reference to the action of the British yacht *Deerhound*, when the *Alabama* was sunk by the *Kearsage* off Cherbourg; and was again discussed with reference to the help rendered to the crew of the *Variag*, when that vessel was destroyed last year in the harbour of Chemulpo. It must doubtless be the duty of the Government to which the rescuers belong to see that their charitable interference does not set free the persons benefited by it for continued service in the war.

II The second class of neutral obligations is of much wider scope than the first, and gives rise to a greater number of debateable questions It is positive in character, imposing on the neutral State duties of interference with the action of belligerents and of its own subjects.

1. The neutral Government is, for instance, bound to prevent the occurrence of hostilities in its ports and territorial waters. The non-fulfilment of this duty was the ground of complaint in the long controversy between Portugal and the United States with reference to the *General Armstrong*. There are, of course, States which are unable so to demean themselves as to be entitled to have their neutrality thus respected, as was the case when the *Variag* and *Korietz* were attacked in Korean waters at Chemulpo; and as seems to have been, at any rate partially, the case when the *Reshitelni* was forcibly abducted from the Chinese harbour of Chifu. A neutral State is, no doubt, on principle, similarly bound to prevent the use of its territory for the reception and transmission of messages by wireless telegraphy, in furtherance of belligerent interests, and China seems to have accordingly destroyed, though tardily, the electrical instalment placed by the Russians in the neighbourhood of Chifu, for the maintenance of communications between the beleaguered fortress of Port Arthur and the outer world.

2. The neutral Government is bound to prevent the use of its territory as a base for hostile operations, i.e. as "l'étendue des frontières d'un État, d'où elle devra partir pour une expédition offensive, et où elle trouvera un refuge au besoin; celle, enfin, sur laquelle elle devra s'appuyer si elle couvre son pays défensivement" [1].

[1] Jomini, *Précis de l'art de la guerre*, I art 18.

(1) It must, of course, see that no enlistments take place there, and.

(2) That no expedition starts thence to take part in the war.

(3) Since the case of the *Alabama* it has been widely maintained that a ship of war, at any rate if equipped as such, is so far analogous to an expedition that its despatch for belligerent employment must be similarly prevented. This rule might well have received fresh illustration from the recent escape of the torpedo boat *Caroline* from Messrs. Yarrow's yards on the Thames to Libau. It is perhaps hardly necessary to say, that the export to a belligerent of boilers, or other essential portions, of war-ships raises no question of neutral duty. Such export to Russia has been taking place on a large scale, both from Germany and from this country.

(4) The neutral Government is also bound, as was laid down by Lord Granville in 1870, to prevent the despatch from its ports of coal or other necessaries to a belligerent fleet at sea, supposing always the destination of the supplies so exported to be established beyond question. The difficulty of proving such a destination seems, so far, to have prevented our own Government from performing its duty in this respect, except, in December last, in the case of the German steamer *Captain Menzell.* In Germany, perhaps for the same reason, no effort whatever seems to have been made to prevent the chartering of private vessels, with a view to their meeting the Russian fleet, at pre-arranged points along its outward route, with supplies of coal. As regards this head of neutral duty, most Governments are content to exercise the powers vested in them by their respective penal codes for the punishment of individuals whose acts tend to bring those Governments into unfriendly relations with foreign countries. Great Britain and the United States have, however, further strengthened their hands for this purpose, by passing Foreign Enlistment Acts, the provisions of which are specifically directed against persons so conducting themselves as to make the neutral territory, in any of the ways just indicated, a base for the operations of one belligerent against the other. These provisions, it may be observed in passing, from abundant caution, treat as offences conduct short of that which the country is internationally bound to prevent. Thus, the British Foreign Enlistment Act penalizes, not only the equipping and despatching of a ship of war for belligerent use, but also the building, within His Majesty's dominions, of any ship, with intent, or with reasonable cause to believe, that the same will be employed in the military or naval service of the belligerent. It was under this Act that proceedings were taken to prevent the

loading with coal of the *Captain Menzell*, and against Mr. Roche and Mr. Sinnett, as concerned in the despatch of the *Caroline*. These Acts are no measure of international duty; and foreign countries have no ground of complaint if they are not put in force.

(5) It is well established that "asylum" may be extended to belligerent war-ships on a far more liberal scale than a similar indulgence would be granted to belligerent armies. While troops, which for any reason pass over into neutral territory, must be disarmed and "interned" by the neutral Power till the conclusion of peace, war-ships are permitted to enter neutral harbours and to put to sea again. A crippled or stormbound vessel is thus neither denied access to port, nor does she immediately become liable to internment. It is, on the other hand, equally well established that such restrictions must be placed upon this concession of "asylum" as will prevent it from resulting in the use of neutral waters as a belligerent base.

Different views are taken by different Powers of the extent of their obligations in this respect, and of the precautionary measures which it is expedient for them to adopt, with a view to placing the discharge of these obligations beyond reasonable question. On these points International Law speaks, therefore, as yet with an uncertain voice; and great differences are observable between the restrictions placed by the various neutral nations upon the use which may be made of their ports by belligerent war-ships. These restrictions tend to increase in stringency, though perhaps no one of them is internationally essential. The Scandinavian States, for instance, soon after the outbreak of the present war, prohibited altogether the entry of such ships into their military ports.

The more usual prohibitions relate to the following points:—

(*a*) The bringing in of prizes This was very generally forbidden, except under stress of weather, in the proclamations of last year. The French proclamation seems only to prohibit stay with prizes for more than twenty-four hours.

(*b*) The length of time during which a belligerent war-ship may remain. On this point the French proclamation was in very general terms: "La durée du séjour dans nos ports de belligérants non accompagnés d'une prise n'a été limitée par aucune disposition spéciale;" but Great Britain, the United States, and many other Powers insist upon the departure of the ship within twenty-four hours. Lord Percy had occasion to explain in the House of Commons that this limit is not imposed by International Law. If the stay is prolonged beyond the prescribed limit, the ship must be disarmed, and its crew interned, as in the case of the *Manjur*,

and afterwards of the *Askold* and *Grosovoi*, at Shanghai, and of other Russian ships of war in the German port of Tsing-tau.

(*c*) A rule now very generally enforced prohibits the departure of a belligerent ship of war till twenty-four hours shall have elapsed since the departure from the same neutral port of any vessel belonging to the other belligerent.

(*d*) Increase of armament or crews is perhaps universally prohibited; though it may be remarked that the rule to this effect, contained in the French circular of last year, seems to apply to such increase only when effected "à l'aide de ressources puisées à terre." Would it be permissible under this circular for a belligerent ship to receive guns and recruits from a transport which had followed her into French waters?

(*e*) A belligerent vessel is universally allowed to effect necessary repairs while in a neutral port, as also to take in provisions required for the subsistence of her crew

(*f*) May she also replenish her stock of coal? To ask this question may obviously, under modern conditions and under certain circumstances, be equivalent to asking whether belligerent ships may receive in neutral harbours what will enable them to seek out their enemy, and to manœuvre while attacking him. It was first raised during the American Civil War, in the first year of which the Duke of Newcastle instructed Colonial Governors that, "With respect to the supplying in British jurisdiction of articles *ancipitis usus* (such, for instance, as coal), there is no ground for any interference whatever on the part of Colonial authorities." But by the following year the question had been more maturely considered, and Lord John Russell directed on January 31, 1862, that the ships of war of either belligerent should be supplied with "so much coal only as may be sufficient to carry such vessel to the nearest port of her own country, or to some nearer destination." Identical language was employed by Great Britain in 1870, 1885, and 1898, but in the British Instructions of February 10, 1904, the last phrase was strengthened so as to run: "or to some nearer *named neutral* destination." The Egyptian proclamation of February 12, 1904, superadds the requirement of a written declaration by the belligerent commander as to the destination of his ship and the quantity of coal remaining on board of her; and Mr. Balfour, on July 11, informed the House of Commons that "Directions had been given for requiring an engagement that any belligerent man-of-war, supplied with coal to carry her to the nearest port of her own nation, would in fact proceed to that port direct"

Finally, a still stronger step was taken by the Government of this country, necessitated by the hostile advance towards Eastern waters of the Russian Pacific squadron Instructions were issued to all British ports on August 8, which, reciting that "Belligerent ships of war are admitted into neutral ports in view of the exigencies of life at sea, and the hospitality which is customary to extend to vessels of friendly Powers, but this principle does not extend to enable belligerent ships of war to utilize neutral ports directly for the purpose of hostile operations," goes on to direct that the rule previously promulgated, "inasmuch as it refers to the extent of coal which may be supplied to belligerent ships of war in British ports during the present war, shall not be understood as having any application to the case of a belligerent fleet proceeding either to the seat of war or to any position, or positions, on the line of route, with the object of intercepting neutral ships on suspicion of carrying contraband of war, and that such fleets shall not be permitted to make use, in any way, of any port, roadstead or waters, subject to the jurisdiction of His Majesty, for the purpose of coaling, either directly from the shore or from colliers accompanying such fleet, whether vessels of such fleet present themselves to such port or roadstead, or within the said waters, at the same time or successively, and that the same practice shall be pursued with reference to single belligerent ships of war proceeding for the purpose of belligerent operations, as above defined; provided that this is not to be applied to the case of vessels putting in on account of actual distress at sea." (See Parliamentary Paper, Russia No. 1 (1905), p. 15, and Malta Government Gazette of August 12, 1904.)

III. The third head of neutral duty is of a negative character, obliging the neutral State to acquiesce in acts on the part of belligerents which, but for the existence of war, would be unlawful and ground for redress.

(1) Thus, although, under ordinary circumstances, not only the High Seas but also territorial waters are free to the passage of the ships of all nations, this right of navigation is, in time of war, subordinated to the right of belligerent fleets to attack one another in any but neutral waters, with far-reaching missiles, within range of which neutral vessels approach at their own proper risk. Against this risk the neutral has visible and audible warning. It is a very different thing should a belligerent by a deplorable misunderstanding attack neutral vessels on the High Seas. Their Government is

then entitled forthwith to take steps to obtain full satisfaction for the injury sustained, unless it should choose, as was done with reference to the recent occurrence on the Dogger Bank, to request an impartial opinion upon the facts of the case and the responsibility of those concerned. A neutral is also, beyond question, at the present day, affected with constructive notice that if he traverses the territorial waters of a belligerent (which may be taken to extend three miles seaward from low-water mark), he may find them infested by mines, placed there by one or other belligerent, for purposes of attack or defence, and will be without redress should he suffer in consequence. It is, on the other hand, equally certain that, beyond the three mile limit, a belligerent has no right to resort to secret means of destruction which are as likely to prove fatal to neutrals as to his enemy. So much seems to have been admitted on all hands, with reference to neutral losses which might have been occasioned by the mines met with in the High Seas during the siege of Port Arthur. The only doubt was whether, as a matter of fact, those mines had drifted from Russian territorial waters, or had been deliberately placed by the Russians beyond the three mile limit. I refrain from discussing the question, raised in some quarters, whether that limit has been, as a result of improvements in artillery, automatically shifted to a greater distance than three miles from the shore. It may be worth while to note, that, within the last week or so, several British shipowners, in expectation of the meeting of the Russian and Japanese fleets, have effected a novel insurance against "all risks of floating mines, and all damage by fire from naval engagements."

Hitherto we have been considering how far neutrals are bound to acquiesce in damage sustained by them as the incidental result of hostilities carried on by one belligerent against the other. The topic is somewhat novel, having been largely brought into prominence by recent applications of science.

(ii) Far other are the mutually connected, and long debated, questions which have next to be considered; relating, as they do, to the duties imposed upon neutrals by the law of prize. It is well established that, under the compromise which has been arrived at between the, otherwise irreconcilable, rights, of the belligerent to carry on his war, and of the neutral to pursue his ordinary trade, neutral States are bound to acquiesce without complaint in certain acts of interference with the trade of their subjects on the part of either belligerent. Of these, briefly, in order.

1. Visit and search with a view to detention: an interference with trade so disagreeable to neutral subjects, especially after a long period during which they have not experienced it, that Mr. Balfour has more than once taken occasion to remind British ship-owners of their liability in this respect. Several points here demand notice.

(1) In what waters may this belligerent right be exercised? *Answer:* In any waters other than the territorial waters of a Neutral. It must, however, be remembered that the exercise of the right at a great distance from the scene of hostilities has been of late years censured as a needless interference with the trade of the world. During the Boer War, Great Britain undertook not to visit German ships at Aden, or at any place not more distant than Aden from Delagoa Bay. But International Law cannot be supposed to have been affected by this concession; and the events of the last year or two have demonstrated how useful the exercise of the right in its full extent may be to a belligerent. The Russians have been visiting and searching neutral vessels in the Red Sea, and even in near European waters.

(2) By what ships? *Answer:* By the lawfully commissioned ships of war of a belligerent. From this category privateers are excluded by Article 1, now generally accepted, of the Declaration of Paris. It can hardly be maintained that the employment of "Volunteer" fleets, or specially subsidized liners, under naval officers, is prohibited by this article. It is not yet settled whether a commission of war may be properly granted, in time of war, to a ship already at sea under the merchant flag. The disability to act under such a commission of vessels belonging to the Russian Volunteer Fleet, which have passed the Dardanelles under the mercantile flag (as did the *Peterburg* and the *Smolensk*), raises questions of a different order from those now under consideration.

(3) Does the presence of a neutral man-of-war, as convoy, protect a fleet of neutral private vessels from visit and its consequences? According to received International Law, certainly not. It must, however, be noted that, in wishing to maintain the old rule upon this point, Great Britain appears to stand nearly alone. The Continental Powers and, with certain reservations, even Japan, regard the assurance of the convoying Commander as a sufficient guarantee of the innocence of the convoyed vessels. The (now withdrawn) United States *Naval War Code* of 1900 was to the same effect.

(4) Do neutral mail ships, or their mail bags, enjoy any privileged position with reference to visit and search?

This question, much discussed, and left undecided, during the

Civil War in America and the Boer War, has received little attention in the course of the war now raging When the *Smolensk* stopped the *Prinz Heinrich* in the Red Sea, and carried off her mails for examination, some excitement resulted in the German Press, but the complaint of the German Government seems hardly to have been pressed home The Japanese Court rejected the plea of "mail ship" in the case of the *Argun.*

2. Causes for the detention of an apparently neutral ship (apart from such universally applicable grounds for detention as resistance to visit, spoliation of papers, &c). Since the Declaration of Paris, which may now perhaps be treated as generally accepted law, these causes are three only, viz. —

(1) *Breach of Blockade* a well understood topic (except on the point of the necessity for actual warning, and perhaps also as to the applicability to it of the doctrine of "Continuous Voyages"), the rules as to which have given rise to no controversy during the present war.

(2) *Carriage of Contraband* a topic on which it will be necessary to dwell at greater length. Several questions have here to be considered, viz. :—

(*a*) Articles to be "contraband" must be such as are useful in war. What articles are of this character, and do they all stand upon the same footing? It is admitted that the list must vary from time to time, and that a belligerent is entitled to specify the articles which he intends to treat as contraband, so long as, in so doing, he does not exceed the licence allowed to him by International Law in that behalf. Two opposing schools of opinion have here to be reckoned with: the Continental, restricting the list of contraband to little more than arms and munitions of war, and the British, according to which the list of "absolutely" contraband articles is supplemented by another, comprising articles which, according to circumstances, may become "conditionally" contraband. The long opposition between these views seems not unlikely to end in a reasonable compromise. Already, Continental lists tend to include the materials out of which, and the machinery by means of which, arms and ammunition are manufactured; while the "conditional" contraband of the British school is admittedly restricted to articles indicated as noxious by special circumstances, and is subjected only to the mitigated penalty of "pre-emption."

The distinction between the two classes and the differences between the rules applicable to each class are fully recognized in the notifica-

tions issued by Japan during the present war, as previously. The Russian notification, ignoring the existence of any class of merely "conditional" contraband, treated as confiscable, in every case, not only coal, but also provisions; and even raw cotton, in favour of which there is a still stronger presumption of innocence. She has, however, receded from this extreme position, in consequence of strongly expressed protests from several of the Powers, Great Britain and the United States in particular, and has undertaken, in accordance with the advice of a commission presided over by Professor de Martens, that provisions, at any rate, will henceforth be regarded as only conditionally contraband, according to the use to which they are to be applied. (See Parl. Paper, Russia, No. 1 (1905), p. 28.)

(*b*) Goods, whatever their intrinsic character, are not contraband, unless they have a hostile destination. Practical unanimity seems now to have been attained upon the interpretation to be put upon this rule. If "absolutely" contraband goods can be shown to be intended to reach the enemy's territory, or if "conditionally" contraband goods can be shown to be intended to reach places occupied by his military or naval forces, they are confiscable; and any neutral vessel engaged in the carriage of the goods may be captured and taken before a prize court.

The destination of the ship for an enemy port is evidence of the hostile destination of the goods, and phrases employed by Lord Stowell have been pressed to mean that no other evidence would suffice. The destination of the ship is, however, now admitted to be only a rough test of that of the cargo, which, under the doctrine of "Continuous Voyages," may be otherwise established. Little has been heard in the present war of the question so much debated during the latter half of the nineteenth century, as to the applicability of this doctrine to the carriage of contraband. For the contrast between older and later opinion on this point, it may be sufficient to refer to Lord Stowell's decision in the *Imina*, and the decision of the Italian Court of Appeal in the case of the *Doelwijk*.

(*c*) During what portions of her voyage is a ship liable to detention for carriage of contraband?

Answer. At any time after she has sailed with contraband on board, destined for the enemy, till the contraband goods have been unloaded. When that has taken place, her offence is said to have been "deposited," and on her homeward voyage she is exempt from seizure. Misunderstanding the rule upon this point, the Vladivostock Prize Court condemned the *Allanton*, because, though, when

stopped on her return voyage, her cargo was innocent, she was alleged to have carried contraband for Japan on her outward voyage. The decision was reversed on appeal to St Petersburg.

(3) *Enemy Service*: i e, the carriage of enemy persons or despatches. A neutral ship so engaged will be detained and sent in. Perhaps the only case illustrative of this rule which has occurred in the present war is that of the *Nigretia*, which seems to have been condemned on the ground that she was endeavouring to carry into Vladivostock the escaped Captain and Lieutenant of the Russian destroyer *Ratzoporni*.

No duty is incumbent on a neutral State to prevent any of the three classes of acts just mentioned on the part of its subjects; although a belligerent, annoyed at the wholesale character of the assistance thus rendered to his enemy, has, on some occasions, been tempted, for the moment, to express a contrary opinion. Such an opinion has indeed received some literary expression, for instance, in the writings of the Swedish jurist, M. Kleen.

3. Procedure subsequent to Detention: For the protection of what may prove to be innocent neutral property, the captor is bound, in ordinary cases, to place a prize crew on board the captured vessel, and to send her in for adjudication by a prize court. He may, however, find difficulties in the way of doing this. He may, for instance, be in immediate danger of attack by a superior force of the enemy, may be unable to spare the men needed to navigate the prize (especially now that the work on a war-ship is so much more highly specialized than was formerly the case), or may be unable to spare coal for a prize which has possibly exhausted her own supplies of fuel. Under these circumstances what steps may be taken by him?

If ship and cargo belong, beyond question, to the enemy, he may, after taking off the crew, sink the ship, the property in which is now vested in his own Government.

If, however, the ship or cargo be neutral, the matter is not so simple. The neutral Government is not bound to acquiesce in the destruction of the possibly innocent property of its subjects, at any rate unless some overwhelming necessity can be shown for the course which has been adopted; if, indeed, even overwhelming necessity would be sufficient to justify it.

This is, of course, the question raised by the sinking of the British ship *Knight Commander*, which was effected on July 23, 1904, in

accordance with the Russian instructions, and was approved of by the Vladivostock Prize Court. The attitude of the British Government has been all along adverse to the legitimacy of such a step. Before the occurrence, our ambassador had intimated our disapproval of the Russian instructions on the point, and he presented a strong protest against the sinking five days after it had happened. The incident was discussed in both Houses of Parliament (July 28, August 11) and was spoken of by ministers as an "outrage," "a serious breach of International Law." I am not sure that this language could be fully supported by a reference to the opinion and practice of nations. While it is, on principle, most undesirable that neutral property should be exposed to destruction without enquiry, cases may occasionally occur in which a belligerent could hardly be expected to permit the escape of such property, though he is unable to send it in for adjudication. The contrary opinion is, I venture to think, largely derived from a reliance upon detached paragraphs in one of Lord Stowell's judgements on the subject, judgements which, taken together, show little more than that, in his view, no plea of national interest will bar the claim of a neutral owner to be fully compensated for the value of his property, when it has been destroyed without judicial proof of its noxious character. "Where doubtful whether enemy's property, and impossible to bring in, the safe and proper course," says Lord Stowell, "is to dismiss" *The Admiralty Manual* of 1888 accordingly directs Commanders, who are unable to send in their prize, to "release the vessel and cargo without ransom, unless there is clear proof that she belongs to the enemy." This indulgence can hardly, however, be proclaimed as an established rule of International Law, in the face of the fact that the sinking of neutral prizes is, under certain circumstances, permitted by the prize codes not only of Russia, but also of such Powers as France, the United States, and Japan (1904).

4. The Prize Court: It is part of the compromise between neutrals and belligerents that the prize courts instituted by the latter shall be so constituted as, at any rate in the last resort, to decide in accordance with International Law, as generally received. British and United States prize courts are manned exclusively by lawyer judges, many of whom have been of the greatest eminence. On the Continent, prize courts are composed of administrative and diplomatic officials as well as lawyers. The legal element must have been singularly deficient in the Court at Vladivostock, if we may judge from its decisions. The Court of Appeal at St. Petersburg, on the

other hand, thanks, doubtless, largely to the presence on it of Professor de Martens, has displayed both learning and courage in correcting the mistakes of the Court below. The decisions of the Japanese Courts appear to have been unimpeachable.

5. The Penalty·

(1) For breach, or attempted breach, of blockade, either outwards or inwards, and whether she is captured on her outward or on her homeward voyage, a neutral ship is undoubtedly liable to confiscation. The cargo, though innocent, may share the fate of the ship, if both belong to the same owner, and in some other exceptional cases.

(2) Carriage of contraband involves, as a rule, forfeiture of the contraband goods only; the ship and the innocent cargo being ultimately released, unless the ship, or the innocent cargo, belong respectively to the same owner as the owner of the contraband cargo, or are otherwise intimately connected with that cargo. According to the Russian instructions, the ship is to be condemned, as well as the contraband, "when she is carrying to the enemy, or to an enemy's port, (*a*) articles and stores required for shooting, as fire-arms, or objects or substances used for causing explosions, whatever the amount of such things may be; (*b*) other articles of contraband amounting in bulk or weight to more than half of the entire cargo." The former of these grounds for confiscation is, of course, wholly inadmissible. The latter, though not uncountenanced by some Continental regulations, and adopted by the *Institut de Droit International* in its "Règlement des Prises maritimes," art. 117 (3), has long been repudiated by Great Britain, as it is by the United States. Our own country has protested accordingly against certain recent decisions of the Russian Prize Court.

(3) For the enemy service implied by carriage of enemy persons, especially of a naval or military character, or enemy despatches, the neutral ship is herself confiscable. Lord Stowell long ago pointed out why a less severe rule would be insufficiently deterrent. So the *Nigretia*, as already mentioned, was recently condemned for having on board two Russian naval officers. It is a mistake to discuss this topic under the heading of "Contraband."

We have been engaged in an examination of the *concordat* established between belligerents and neutrals, so far as it relates to operations at sea; in other words, with the compromise which has been gradually arrived at between the opposing claims, described respectively by Gentili as "Ius commerciorum" and "Ius tuendae salutis," by Grotius

as "Belli rigor" and "Commerciorum libertas." I have pointed out that the duties of neutrals, as defined by this concordat or compromise, may be classified under three heads.—as imposing restrictions on the free acts of the neutral Government, as calling upon it for active intervention, or as obliging it to acquiesce in interference with its interests on the part of belligerents What has been attempted is rather a map than a picture, and a colourless map. My object in attempting this survey of a large field, some parts of which are better ascertained in detail than the others, has been twofold —

1. I have desired to indicate the place occupied in the subject by each topic relatively to the rest, assigning each topic to the class to which it naturally belongs, so as to bring it within the scope of the governing principle properly applicable to its development and to its discussion. If this course had been always followed, much confusion might have been avoided, e. g. between the duty of a neutral State with reference to the use of its territory as a base, and its duty with reference to such of its subjects as are engaged in carriage of contraband.

2. I have also desired to formulate a list of those topics of neutral duty, in a maritime war, which may be thought ripe for discussion at a Conference, such as was asked for in the Final Act of the Hague Conference of 1899. These would seem to be as follows :—

Under my first head of neutral Duty (Abstention)

(1) Are subsidized liners within the prohibition of the sale to a belligerent by a neutral Government of ships of war?

Under my second head (Prevention)

(2) Is a neutral Government bound to interfere with the use of its territory for the maintenance of belligerent communications by wireless telegraphy?

(3) To prevent the exit of even partially equipped war-ships?

(4) To prevent, with more care than has hitherto been customary, the exportation of supplies, especially of coal, to belligerent fleets at sea?

(5) By what specific precautions must a neutral prevent abuse of the "asylum" afforded by its ports to belligerent ships of war?—with especial reference to the bringing in of prizes, duration of stay, consequences of over-prolonged stay, the simultaneous presence of vessels of mutually hostile nationalities, repairs and approvisionment during stay, and, in particular, renewal of stocks of coal.

Under my third head (Acquiescence). How is this duty to be construed with reference to.

(6) Interruption of safe navigation over territorial waters and the High Seas respectively?

(7) The distance from the scene of operations at which the right of visit may be properly exercised?

(8) The protection from the exercise of this right afforded by the presence of neutral convoy?

(9) The time and place at which so-called "volunteer" fleets and subsidized liners may exchange the mercantile for a naval character?

(10) Immunity for mail ships, or their mail bags?

(11) The requirement of actual warning to blockade-runners, and the application to blockade of the doctrine of "Continuous Voyages"?

(12) The distinction between "absolute" and "conditional" contraband, with especial reference to food and coal?

(13) The doctrine of "Continuous Voyages" with reference to contraband?

(14) The cases, if any, in which a neutral prize may lawfully be sunk at sea, instead of being brought in for adjudication?

(15) The due constitution of prize courts?

(16) The legitimacy of a rule condemning the ship herself, when more than a certain proportion of her cargo is of a contraband character?

On the greater number of those points there is probably good reason for hoping that the approaching Conference will pave the way for a general, and a lasting, agreement.

CELTAE AND GALLI

By JOHN RHYS

FELLOW OF THE ACADEMY

Read May 25, 1905

In November, 1897, there were found at Coligny in the department of the Ain, not far from Lyons and near the Strassburg road, 126 fragments of a very lengthy inscription engraved on a piece of bronze about a metre in height With them were found fragments of a fine statue of a nude god: they were taken to the museum at Lyons. The learned head of that institution, M. Paul Dissard, spent some weeks over them, and succeeded so far in piecing the fragments together that he reduced the 126 to 45. He at once saw that he had to do with a calendar, and communicated the whole to the Académie des Inscriptions et Belles-Lettres, who published it in six plates in their *comptes rendus* In the following year the same plates appeared in the *Revue Celtique*, together with a paper on them by M. Seymour de Ricci, 1898, p. 213 he has since written several more papers on them in the same review. M. Dissard went on devoting further study to the Calendar until he and Capt. Émile Espérandieu, a well-known French epigraphist, were able to fix the exact sequence of the whole. A lithograph was accordingly publishéd in the *Revue Celtique* for 1900 by MM. Dissard and Espérandieu, incorporating the latter antiquary's excellent restorations[1].

One of M de Ricci's communications to the *Revue Celtique* appeared in 1900, pp. 10–27, and it forms a convenient bibliography of all that had been published up to date concerning the Calendar. He passes it all under rapid review; and among other things he notices, at p 14, a communication by M. Héron de Villefosse to the Académie des Inscriptions pointing out that a bronze fragment similar to the Coligny Calendar had been found near Moirans in the Jura in 1802 The restoration of this fragment makes it almost certain that it was in the same language as our Calendar, and that is an important point, as the earlier fragment comes from a place which was undoubtedly in the land of the Sequani.

Of the other and longer articles on the Coligny Calendar far the most important are Prof. Thurneysen's paper in 1899 in Meyer's

[1] One of the most convenient arrangements of the Calendar is the lithographed 'Reconstitution' of it by M. Espérandieu, giving the months of the five years in parallel columns, but it is dated St.-Maixent, 1898, and has to be checked by the later lithograph.

Zeitschrift für celtische Philologie, pp. 523–44, Mr. Nicholson's *Keltic Researches* published last year by Mr. Frowde in London, and M. Loth's *Année Celtique* in the *Revue Celtique* for 1904, pp. 113–62.

The volume of the *Revue Celtique* for the year 1898, which produces the Calendar, contains also two unpublished inscriptions from Rom in the department of the Deux-Sèvres. Rom is supposed to be the site of Rauranum in the territory of the ancient Pictones and situated on the Roman road from Saintes to Poitiers. The inscriptions are on the two sides of a piece of lead, and they are published by the well-known historian M Camille Jullian, of Bordeaux. He found the reading of them very hard, and they show a good many of the difficulties which we usually associate with a graffito, but he has been very painstaking and successful. It would be well to scrutinize the original inscriptions again, perhaps, in the light of the hints which a philological study of them may supply. He gives alternative readings where he is doubtful he makes few philological suggestions, but proceeds to his task of reading the lead with complete impartiality.

There are two or three other documents to be discussed, but they will be briefly described when they are reached.

I.

If the suggestions about to be offered by way of interpreting the Coligny Calendar should be found tenable, it would be needless to say that hitherto it has not been translated. I refer chiefly to the sentences which one is able to extract from the fragments, for they form, philologically speaking, far the most important of the contents. It may be stated at the outset that the key to them is the similarity of the language to Old Irish. It is not only Celtic, but Celtic of the same kind as the Goidelic dialects and distinct from the Gallo-Brythonic ones. The latter had dropped Aryan *p* and changed *qu* into *p*, but, as insisted on by Mr. Nicholson, the language we have here to do with retains both, and in the domain of vowel sounds it freely interchanges *e* and *i*. Other peculiarities will be pointed out as they happen to offer themselves.

The remarks in the following pages are not expected to prove final: they are made merely as a contribution to the understanding of the Calendar, for should any of the conjectures offered stand the test of examination, they may help somebody else to carry the interpretation further.

The Calendar is not supposed by M. Espérandieu to date before the Christian era: see his *Reconstitution*, p. 6. Mr. Nicholson is inclined to describe the writing as consisting of perfectly well-formed and easy

Roman capitals of about the middle of the first century: see his *Keltic Researches*, p. 120.

The order of the months of the year is rendered certain by the final piecing together of the fragments by MM. Dissard and Espérandieu, and practically it had been almost made out before, owing to a peculiarity to be mentioned later as characterizing the months. They make up five years, and include two intercalary months: omitting the latter, the order is the following:—Samon, Duman, Rivros, Anacantios, Ogron, Qutios, Giamon, Simivis, Equos, Elembiu, Edrin and Cantlos. Now *Samon* or *Samonios*, or whatever the full name may have been, claims kinship with the Old Irish word *samrad*, Welsh *haf*, 'summer', so does *Ogronios* with Irish *uar*, Welsh *oer* (for an earlier *ogr-*), 'cold,' and *Giamon* with Old Irish *gaimred*, Old (Gwentian) Welsh *gaem*, Mod. Welsh *gaeaf* or *geuaf*, 'winter.' If then we suppose Samon to have been approximately June we have the beginning of cold weather falling in Ogron, approximately October, and winter giving its Celtic name to December. That seems to fit as well as might be expected; but the first column of the five-year Calendar begins with an intercalary month which thus takes the place so to say of the month of May, and in the third year the other intercalary month comes before Giamon, taking the place of Qutios or, let us say, November. If one takes a year which had no intercalary month one might perhaps say that one half year began with Cantlos and the other with Qutios, that is to say the First of May and the First of November, which would bring the year back to what Celtic folklore and Celtic institutions teach us generally, namely that the great events of the Celtic year were associated with the beginnings of May, of August and of November. One may accordingly give the following approximate equations in so far as any are possible with two intercalary months in five years:—

Cantlos	29	days	—May (unlucky).
Samon	30	,,	—June (lucky).
Duman	29	,,	—July (unlucky).
Rivros	30	,,	—August (lucky).
Anacantios	29	,,	—September (unlucky).
Ogron	30	,,	—October (lucky).
Qutios	30	,,	—November (lucky).
Giamon	29	,,	—December (unlucky).
Simivis	30	,,	—January (lucky).
Equos	30	,,	—February (unlucky).
Elembiu	29	,,	—March (unlucky).
Edrin	30	,,	—April (lucky).

= 355.

Thus they have 30 or 29 days each like the ordinary Athenian months, which also made the total of 355, but at one time it was probably 354 in both: see Daremberg, s. v. *Calendarium* (p. 825), and Thurneysen, loc. cit., p. 525. What was the Calendar of the Greeks of Marseilles like?

The months are all marked lucky or unlucky, the word for the former being *matus*, abbreviated MATV, MAT and M, while the negative is only written ANM. The Goidelic dialects show two forms[1] of the simple adjective, Irish *maith*, 'good,' representing an early *mati-s*, and Scotch Gaelic *math*, 'good,' for *matu-s*, also occurring in Irish *math-gamain*, 'a bear,' literally 'good heifer or good calf,' and more briefly *math*, genitive *matho*, 'a bear.' The Brythonic form is exclusively *mad*, 'good,' whence Welsh *madyn*, a nickname for the fox, to be compared with *math* for a bear in Irish presumably they are both of the class of quasi-proper names like *Bruin* and *Reynard*. The negative adjective was in full probably *anamatus* or *anmatus*, but, as far as I know, it does not occur in Irish, where, however, we have such instances as *an-eolas*, 'inscientia,' and *an-ecne*, 'insipiens.' In Welsh, on the other hand, we have it as *an-fad*, 'bad, evil, criminal.'

The whole Calendar consists of sixteen columns of four months each, except that the two intercalary months (of thirty days each) take up the room of two ordinary months each. For in the intercalations room was reserved for notes at the beginning and the end, not to mention that many of the days of the first intercalary month have two lines each given them, while the ninth day appears to have had three lines and the seventh four lines; similarly in the second half of the month the ninth day had three lines, and after the last day of the month comes a note of no less than five lines, possibly six. The whole is exceedingly fragmentary, which is all the more unfortunate, as in this first month we should have had words written in full or nearly so, which only occur afterwards abbreviated beyond recognition or reduced to a mere initial. The second intercalary month has also a serious gap which, among other things, implies that the sixth day had no less than eight lines to itself. The gaps in the ordinary months are not so serious, as the same month occurs in five successive years.

The first intercalary month begins in big letters about four lines higher than the other columns, but higher still there was a line of writing which began with a D of the same size as the big capitals of the month headings. It is to be noticed that elsewhere in the calendar

[1] Compare Professor Zimmer's paper read to the Prussian Academy (Phil.-hist Cl.) on April 6, 1905, p. 4.

these bigger capitals are confined to the headline of each month and that of the second fortnight of each; also that in the case of the second intercalary month, the first two words of a note which precedes the name of that month are all that is in big lettering there, that name itself being left in the smaller lettering. In other terms the note and the entries following it were associated closely enough together to be regarded as requiring only one distinguishing headline. Vice versa, the line beginning the whole Calendar with the big D is shown to be no mere note associated with what immediately follows, but referring rather to the entire Calendar. Thus the top line would seem to be the title of the whole, or more likely a dedication to a god, let us say the god the massive head of whose statue was found among the fragments of the Calendar. It may have been the harvest god Rivos, the only divinity mentioned. In that case the line may have consisted simply of DEVVO RIVO 'to the god Rivos.' If it was longer it can at most have only comprised the equivalents of the three vocables *Deo Rivo Sacrum*, that is, supposing Rivos to have been the god's name: in case the name was another and a longer one, it could hardly have left room for any equivalent of the word *sacrum*. Below this dedication should come the name of the month, but we have intact only the big letters MID, followed by an imperfect A or X which we have to take as the initial of the name of the month; for MID probably stands for MIÐ, for an earlier *mīs*, the word for month: compare the Irish *mí*, genitive *mís*, Welsh *mis*, 'month.' At any rate Ð occurs as a lisping of *ss* in other Celtic vocables from Gaul, and as to the name itself it cannot have been a very short one, as it left no room for MATV, 'lucky,' which accordingly begins the next line. This month ends with a note, which, owing to the engraver having begun the heading so high, fails by a line or so to fill the space allotted to it. The note ends with QVIMON, a word which Mr. Nicholson seems to have been right in expounding with the aid of the Latin *bimus*, *trimus*, and *quadrimus*, 'four years old'; but it is not clear whether QVIMON represents the complete word or is merely an abbreviation of what may have been pronounced *quinquimon* [1]. In either case it refers doubtless to the lustrum of five years covered by the Calendar.

[1] It is to be noticed that abbreviations in this document are not restricted to leaving the latter part of a word unwritten Witness, besides the doubtful case of ANM, DVMN for Duman in the second Intercalation, At 11, on Giamon 1 *Simivs* for *Simivisonni*; on Giamon 7 TIOCBR for *tiocobrixtio*, and on Equos, At. 6 SIMISO for *Simivisonni*; also ANACTIO(S) once in heading and once on Rivros 7, for *Anacantios*, unless it be rather a variant fully written.

What remains of the name of the second intercalary month is ANTARAN M: the M means *matus*, 'lucky,' but before ANTARAN is seen the end of a letter which seems to have been C or S, this suggests Cantaran or Santaran. The column begins with the note to which reference has already been made it reads —

CIALLOS B..IS
SONNO CINGOS
..MMAN . M . M . XIII
.... LAT CCCLXXXV

This seems to mean literally, 'The total which is there (is) the course of the seasons, months 13, days 385' that is to say, the total when you reckon the entries for the whole year will be found to be 13 months, making 385 days. The reckoning will be explained presently; now as to the words used:—CIALLOS has been identified by Mr. Nicholson with Irish *ciall*, 'a gathering or collection,' on which see Dr. Stokes's *Urkeltischer Sprachschatz*, p. 85, and the second word he has proposed to complete as BVIS, loc. cit., p. 136, other forms perhaps, such as *beis* or *biis*, might be suggested, but BVIS would seem to fit the fracture better. In any case, I should regard it as what in Irish grammar would be treated as the relative form[1] of the verb 'to be' in the third person singular of the present tense, and translate it 'which is wont to be.' SONNO[2] I would identify with the Irish word *ann*, later *and*, 'there, therein, in it,' which is used sometimes like English *there* in 'how many days are there in this month?' Windisch, in his *Irische Texte*, pp. 226, 365, gives instances where it refers to what follows, such as 'is and nochotlad cech naidchi for Sligi Midluacra,' which may be rendered 'it is there he slept every night, on the Midluachair Road' see also Prof. Strachan's *Selections from the Old Irish Glosses*, pp. 5, 46. As to the phonology of the word the *s* is absent in the Irish word just as it is in *indiu*, 'to-day,' which is represented in the Calendar by SINDIV. Then the *a* of *ann* for an earlier *o* is one out of many instances where the former vowel has superseded the latter, at any rate in the spelling. CINGOS is of the same origin as Irish *cingim*, 'I go,' and CINGOS here seems to be applied to 'the going,

[1] In point of fact it is a reduction of *buient-s*, the nominative singular of the present participle of a verb corresponding in both meaning and form to the Welsh *bydaf* (from a theme *buiy-*) 'I am wont to be'; in form also to the dialectal Greek *φυίω* and Latin *fio*: see Brugmann's *Grundriss der vergleichenden Grammatik*, ii. 1061, 1074

[2] It is right to add that the first intercalary month had in the entry on the second day a line beginning with SONNA, but what should follow is gone.

the march or course of the year', but what the word following may have been is not quite certain, however, Mr. Nicholson has treated it very naturally as AMMAN and compared Irish *amm*, *am*, 'time.' In any case M. Dissard's lithograph indicates nothing that would tend to make that reading improbable, and what we have here would seem to be an abbreviation standing for a genitive plural. In the line below there appears to have been room for one or two letters, but I see no evidence that there were any: even if there were, they could have only made a very short word, meaning probably 'and,' 'or,' or 'even.' LAT is evidently an abbreviation of a word of the same origin and meaning as Old Irish *láthe*, 'a day,' a vocable never detected, as far as I know, in any Brythonic dialect it probably meant the balancing of night and daylight as the two wings of the day of twenty-four hours, and it seems to be of the same origin as the Irish *láith*, 'a balance,' accusative plural *láithe*, as in 'eter láithe Lugba,' meaning 'in the scales of (the goldsmith) Lugba,' quoted in Cormac's *Glossary*, s. v. *Laith*.

So much for the individual words the syntax deserves even more notice. Thus BVIS SONNO means 'which is wont to be therein, or in it,' meaning in the whole year of items which follow, and not the mere summing up into 13 months and 385 days. The consuetudinal form of the verb 'to be' comes in naturally, in case the reckoning was always the same when the second intercalary month began the year. If the wording had not meant 'which is usual' but 'which is,' it would have suggested that in another calendar it had been different, or might be different in the future, whereas this reckoning was wont to be always the same. The distinction would still appeal to an Irishman, for he would say in the one case—let us for the moment suppose him to use the obsolete *ciall*—'an ciall bhidheas and,' and in the other 'an ciall atá and.' The Anglo-Irishman would give the relative clause in the former with admirable precision by saying 'which does be in it' as distinguished from 'which is in it,' expressing mere actuality. The whole introductory note may accordingly be rendered: 'The total which is wont to be there (is) the course of the seasons, months 13, days 385.' This would make the second intercalary month always the same length, 30 days; but there is no hint that the other intercalation was similarly invariable.

Let us take next the figures themselves the intercalary month with its 30 days prefixed to the 355, which the other months supply from Giamon to Qutios inclusive, make just the 385 days, and the reason this sentence was placed at the head was that the intercalary

CANTARAN or *S*ANTARAN began that year. Taking that, however, as certain, one finds that our calendar begins nearer to the middle of a year than to its commencement, whence it appears also that it was only one of a series. In other terms, if you reckon back from where the second intercalary month begins the year of 385 days with the words CIALLOS *BUIS*, you will find that our lustrum consists of portions of six years, as follows.—

Year		Days	
Year A	beginning with the first intercalary month, plus the six months from Samon to Qutios inclusive (7 months)	208 days	
„ B	Giamon to Qutios inclusive (12 months)	355 „	
„ C	„ „ „ „ .	355 „	= 1,835.
„ D	The second intercalary month, plus Giamon to Qutios inclusive (13 months)	385 „	
„ E	Giamon to Qutios inclusive (12 months)	355 „	
„ F	„ Cantlos „ (6 months)	177 „	

This total divided by 5 gives 367 days as the average approach which the Sequanians were able to make to the actual length of the year, but the error could be corrected by varying the length of the first intercalary month. The year of 385 days begins with the second intercalary month, which, when absent, would allow us to put Qutios into its place as the first month of the year consisting of 12 ordinary months. Then the first day of Qutios may be regarded as corresponding, as nearly as we can get any correspondence in such a case, to the first of November, to which Celtic folklore unanimously points as the calends of winter and the beginning of the year [1].

One of the things which first challenges one's attention in the calendar is the fact that each month has a number of days, opposite which the names of other months are placed. I hazarded to Mr. Nicholson the suggestion that these insertions were of the nature of weather prophecies, and I have not found any reason yet to reject that conjecture. On the other hand Mr Nicholson called my attention to the fact, that, among other things, the Roman calendar of Polemius Silvius dating just before the middle of the fifth century has weather forecasts regularly incorporated see the Berlin *Corpus Inscriptionum Latinarum (editio altera)*, i pp 257–79. The method adopted in the Coligny Calendar is rather neater and hardly less precise. Thus the first day of Cantlos, which may be

[1] But for reference I find it more convenient to treat the lustrum as consisting of five whole years, as M Espérandieu has done.

roughly taken to have been May, has opposite it Edrini, which is the genitive of the name of the previous month in other words, the first of May is a day of April and enjoys April weather; then a little later it has in the third year a day from each of the two following months, that is, those two days were to have the weather associated with June and July Quite recently I came across a charming bit of Irish folklore which is in point. It is to be found in Father Dinneen's lately published Irish-English Dictionary · under the word *mí*, 'month,' one reads as follows —'*Mí na Bó Riabhaiche*, March, the month of the dark-coloured cow, as, according to the legend, a *bó riabhach*, a dark-coloured cow, complained on the first of April of the harshness of March. March borrowed a few days from April, these days were so wet and stormy that great floods came, and the *bó riabhach* was drowned, hence March has a day more than April, and the concluding days of March are called *laethanta na riabhaiche*, the days of the dark-coloured cow.' I wrote to ask Father Dinneen where he got this folklore, and he replied that his version of the story, which is current all over West Munster, was taught him by his mother at home in the neighbourhood of Killarney; but he added that the tragedy of the *bó riabhach* is known, with varying details, all over Ireland, even where Irish has not been the spoken language for generations; also that persons who have not heard of the cow, talk of 'the borrowed days,' the rough and stormy days at the end of March. Lastly, to prove the genuineness of the story there are not wanting those who want to mend it by substituting for April the shorter month of February.

Each month is divided into two parts, as it seems to have been originally lunar. Of the two the first always consists of 15 days · the other portion is made up of 15 or 14 days, according as the month has 30 or 29 days in all. The second part is always headed ATENOVX, which suggests to me some such a meaning as a second series of nights, and recalls the fact, otherwise known, that the Celts counted nights and winters, rather than days and summers. But the word offers an initial difficulty: is it the whole or only an abbreviation for some such a collective as *atenouxtion*? Though there was room sometimes to write more than ATENOVX[1] in large capitals, I am

[1] It is to be noticed that *ou* in such instances as this retains a trace of the Greek spelling with *ου* for *u*; so also with the *x* in *atenouxtion*, which stands for Greek *chi*, *χ*. The alphabets in Gaul were doubtless derived from the Greeks of Marseilles, but were subsequently more or less completely changed under Latin influence.

inclined to think that we have here to do with an abbreviation, such as *atenouxtion*, where *xt* would represent the sound of χt, Irish *cht*; for one can hardly help equating *nouxt* with the stem of the Welsh *nos* (for *noct-s*), 'night,' and of *he-noeth*, Irish *in-nocht* (for *hin-nocht*) 'to-night.' In any case it seems that the composition of such a form as *atenoux* would baffle all explanation. compare the case of *trinux* to be discussed presently: see p 95 below. Lastly, the prefix *ate*, Irish *aith*, Old Welsh *at-*, reduced later to *ad-*, had pretty much the force of Latin *re*, and is found so used, for example, in such instances, cited in the *Grammatica Celtica*, p 869, as *athscribend* (gl *rescriptum*), *duathmaldachad* (gl *ad remalediccendum*); or to mention older formations one may take such an instance as Irish, *aithesc* (for *ate-sequ-*), 'an answer or admonition,' Welsh *atch* (for *ad-hep-*) 'answer,' literally 'an after say, a second say,' Mod. Ir. *athlá*, 'another day, a respite,' Manx *yn nah laa*, 'the second day', Irish *athbharr*, 'an after crop,' and *athfhás*, 'a new or second growth,' Manx *aa-aase*: compare the Welsh *adlad*, 'aftermath' This prefix has always been a favourite one in the Celtic languages.

When the month has only 29 days the ATENOVX is 14 days, which leaves an empty line as compared with the months of 30 in the parallel columns, that empty line is occupied by a word which is variously written DIVERTOMV, DIVORTOMV, DIVIRTOMV, and once DIVERTIOMV. The exact equivalent occurs in the Med. Welsh *y urthym*, for *di urthym* as in Mod. Welsh *o-diwrthym*, Cornish *deworthyn*, *dheworthyn*, 'away from us, from us-wards so to say, or in French *de vers nous*.' The meaning of this insertion in the calendar will be understood at once, when one is told, that every one of the months which has it is marked in the heading as unlucky: so it stands here simply in the sense of 'absit omen!' But a little more as to the formation of the word· *di-wrthym* is the preposition *wrth* with *di* prefixed; the simpler form *wrthym* means 'to us, to us-wards, *vers* or *envers nous*,' and the corresponding Old Irish preposition was *frinn* or *frinni*, 'against us, to us, *envers nous*'· for copious illustrations of both forms and meanings see the *Gram Celtica*, pp 648–51. *Frinn* is a shortening of *frinni*, and that stands for some such an earlier form as *friam-ni* or *friom-ni*, with the personal pronoun *ni* appended as is done also in Welsh *wrthym ni*, which the literary language resists the temptation to reduce to *wrthyn ni*. In Irish, however, there was a reason for it· the first person singular was *frimm*, *frim*, or *friumm*, 'against me, or to me,' and so throughout the prepositions with personal endings in Irish; the result is that the *m* has been assimilated away completely in the first person plural. What I have already

given is, however, no measure of the shrinkage which has taken place in these words, for they start with a *frith* which Dr. Whitley Stokes, loc. cit., p. 273, traces back to an early *vrti-*, 'gegen.' But the same sort of contraction has taken place in the preposition from which we have Old Irish *limm*, 'by or with me,' *linn*, *linni*, 'by or with us,' from *leth*, 'side,' early *letos*, 'side, half' see the *Cymmrodor*, xviii. 161. Another familiar instance of the disappearance of the *th* in Irish offers itself in the case of the word *láthe*, 'a day,' for which *láa*, *láe* occur often enough in Old Irish. In brief the phonetics of these words suggest no difficulty, but it may be objected to the interpretation here offered of *divertomu*, that the Irish preposition *frith* does not occur compounded with *di* in Irish. As far as I know that is so, but it would be a bold statement to make, that the Irish known from the eighth century down has preserved all the wealth of forms which may have belonged to Early Goidelic. In fact it could not be true, and it is probable, as will be shown presently, that the latter had the exact equivalent of *divertomu*. Compound prepositions beginning with *di* or *de* luxuriate in the Brythonic dialects as they probably did also in Gaulish, which may be taken to account to some extent for the fondness for them shown in French: witness *de par*, *de près*, *dans* (=*d'ens*), *dedans*, and others. And Goidelic has never had any objection to the heaping of prepositions, especially on the verb; but, to come back to prepositions which take personal terminations, two occur to me which are both compounds of *frith*, namely (1) Manx *marym*, 'with me,' *marin*, 'with us,' with which must be classed Sc. Gaelic *mari* given in Mackenzie's *English-Gaelic Dictionary* as meaning 'with'; and (2) Manx *horym*, 'by me,' *horin*, 'by us,' to be analysed in the same way as the longer formula Mod Irish *maille rinn*, 'together with us,' Med. Irish *immalle rinn*, 'together with us,' made up of *imb-al-leth*, followed by *frith* with personal terminations agglutinated.

Leaving *frith* on one side for a moment, a parallel can be produced which may be traced back into Old Irish, and practically further: that is the one which in Mod. Irish yields such forms as *chugam*, 'unto me,' and *chugainn*, 'unto us,' but in spite of O'Donovan's 'unto' (*Irish Grammar*, p. 139), one may render it 'towards me, towards us,' or even 'coming towards me, towards us,' and so all through the group. Sc. Gaelic has *chugad*, 'towards thee,' and Manx has all the forms but partly contracted as in *hym*, 'to me,' *hooin*, 'to us.' Among the examples given in the *Grammatica Celtica* (p 648) one need only mention *cuccum*, 'ad me,' *cucunn*, 'ad nos,' and *cucu*, 'coming towards them,' in 'conaccatar fiacc find cuccu' which is there rendered 'viderunt F. pulchrum ad se venientem.' A glance at the

conjugation of the preposition *oc*, Mod. Irish *ag* (commonly pronounced *aig*), 'with, *apud*,' with such forms as *ocum*, 'with me,' *ocunn*, 'with us,' in Mod. Irish *agam* and *againn* respectively, would show one that the other is not a reduplicated form of *co* or *cu*, 'usque ad,' but a compound with that preposition prefixed to the forms of *oc*. *Co* is in Welsh *pw* or *py* mostly reduced to *bw* or *by*, 'as far as, *usque ad*,' as in *o le pw-y gilyđ*, 'from (one) place to another,' literally 'to its fellow,' or *or mor bw-yr mor*, 'from the (one) sea to the (other) sea' (Skene's *Four Ancient Books of Wales*, ii. 99). It was a common preposition in Old Slavonic in the form *kŭ*, 'to,' and its influence on a following consonant in Irish shows that in Celtic it was once *quos*, so that such a form as *chugainn* is based on an early compound *quos-ociomu*, meaning 'towards us,' or more nearly 'as far as with or by us,' as it were 'usque ad apud nos.' The prefixed element was unaccented, whence the reduction of its initial into *ch*, unphonetically represented in Zeuss's *cuccum* and other forms with a *c* instead of *ch*.

Though Irish does not show a preposition compounded of *frith* with a *di* prefixed, there is reason to infer that it once had it, and that the syllable *di* standing just before the accented syllable was dropped only by way of phonetic decay. I infer it from the meanings of *frith*; for besides 'towards, to, against,' it is also used in the contrary sense, namely, that of 'from,' pretty nearly the exact contrary of the other meaning. This can be readily matched and explained by the student of Med. Welsh: thus *gan* is usually 'with,' for an earlier *cant* corresponding to Breton *gant*, *gañd* or *gan* of the same meaning; but Mod. Welsh *gan* also means 'from' as in *cymer hyn gan yr eneth*, 'accept this from the girl,' but this was *y gan*, 'de par,' in the Welsh of the *Mabinogion*, for *y* was all that was then left of the unaccented preposition *di*, softened down to *đi* and written *dhe* in Cornish. In Mod. Welsh it has wholly disappeared except where it has been reinforced by the synonymous preposition *o* as in *o-đi-gennyf*, 'from me, *de par moi*,' and *o-đi-wrthyf*, the reverse of 'towards me.' One or two instances from the *Mabinogion* (pp. 10, 18) may be mentioned at random—*Ynteu a gymerth rygig y gan y uarch*, 'so he allowed his horse to amble,' literally 'but he accepted an amble from his horse'; *nys diodef6n y gennyt*, 'we will not suffer it from thee.' So have we probably to explain Goidelic instances such as the following from Fiacc's Hymn (Windisch, loc. cit., p. 13):

A druid fri Loegaire tichtu Phatraicc ni cheilltis.

'His druids from Loegaire used not to conceal Patrick's coming.'

This might be rendered into Welsh, *Ei đerwyđon odiwrth L. ni chelent*

đyfodiad Padrig. So always with the Irish verb *scaraim*, 'I separate myself,' as in *Fled Bricrend* (Windisch, loc cit., p. 257), *scaraid dā Bricriu friu*, 'Bricriu takes himself away from them.'

Within the Aryan family the Celts are alone in systematically giving their prepositions personal terminations, and the interesting instance which has been identified in *divertomu* does not stand alone in the Calendar. We have also the preposition *oc* already mentioned on the fourth day of Anacantios in the fourth and fifth years one reads OCIOMV RIVRI and the previous year has OCIOM RIVRI. This entry means *apud nos Rivri*, 'the Rivri are with us' to-day, otherwise, as *oc*, Mod. Irish *ag*, is a preposition used to help to express the sense of the verb 'to have, *habere*,' we may render it 'we have the Rivri' this day. A similar entry occurs in the previous month Rivros, where the fourth day of the first year has . . . OMV RIVO doubtless for OCIOMV RIVOS, 'apud nos Rivus.' Rivos was the harvest god, and Rivros was the harvest itself· we shall come back to them when we come to their month, for another instance of the preposition remains to be mentioned here. It is the word POGDE in the note at the end of the first intercalary month. The passage has already been mentioned. it is unfortunately imperfect, and reads thus:—

. . . ID RIXTIO
COB . . . . CARIEDIT
OX*t*ANTIA
POGDEDORTON IN
QVIMON

Mr. Nicholson seems to have rightly fixed on RIX as '*rex* or chief,' and to have also been right in surmising that POGDE represents a reduction of *pocde*, that is in case *g* in this word is not a mere error of the engraver's, as in the case of CIAMON for GIAMON and other instances which are to be met with in the table. The longest spelling of what follows RIX is TIOCOBREXTIO, which is to be discussed presently. CARIEDIT looks as if it may have been *carieđit*, a lisping of *cariessit*, an aorist third person singular differing only in conjugation from the *legasit* of the Bourges inscription: see Stokes's *Celtic Declension*, p. 75. Mr. Nicholson has rightly referred *caredit* to Stokes's *karjâ*, 'blame,' which is represented in Irish by *caire*, 'blame,' and in Old Welsh by *cared* (sounded *caređ*[1]) which is found glossing the Latin

[1] More exactly Welsh *caređ* represents an earlier *carýa*, and the Irish must have been the same, though accented perhaps *cáryu*, but whether that was the accent or not, the *y̆* was retained, represented in writing by *g* in derivatives such as *cairigud*, 'the act of blaming,' cited by Stokes in his *Urkeltischer*

words *nota* and *nequitiae*, and Mr. Nicholson seems right in concluding that the more original meaning of the Irish and Welsh words was that of 'mark,' in the sense eventually of a mark against one or, as we should more briefly put it, 'a bad mark.' What went before RIX we have no means of restoring all that is left is a final ID, which I should guess to stand for *id* as part of an abbreviation, meaning a period of six months, and involving MID, 'month'; but other abbreviations are quite possible, such as *leto-blID* representing a word meaning a half year. In any case it is not improbable, that the sentence referred to the previous part of the year having been included in a previous calendar in other words that the *rix*, or chief of the TIOCOBRENTIO, had marked it shall I say 'marked it off'? That is, he had reckoned it already in the regular course of moving forward the peg or nail which marked each day as it came. As pointed out by Mr. Nicholson the process is made familiar to the readers of Cicero (*Epistolae ad Atticum*, v. 15 1) by his words *ex hoc die clavum anni movebis*. The hole for the *clavus anni* has been made through the bronze in front of each day of every month in the Coligny Calendar

The next sentence, for such I take it to be, commences with o followed by an imperfect letter which M. Dissard declares to Mr. Nicholson to be an x followed by a fracture, where M. Dissard suggests a T; so I should read OX*t* ANTIA POGDE DORTON IN QVIMON, and translate it provisionally 'But this here without it (i.e. without the previous half year) has been put into the lustrum of five years,' meaning thereby the second half year which with the intercalary month begins the Calendar before us, while the first half year had been marked or pegged off into another calendar, whence POGDE, 'without it.' Taking the words one by one the following are my guesses: OXT equates with

Sprachschatz, p 71, and *ni chairigedar*, 'non notat, accusat,' and other instances (given in the *Grammatica Celtica*, pp. 437–40) of forms in *-igim* What happened was that the *ÿ* in Welsh became *đ* as in *cared*, and in Goidelic the sonant palatal corresponding to the surd palatal in the German *ich* or *mich* I remember well noticing the softer sound for the first time in the German pronunciation of *Braslhen*, and how that name seemed to me sometimes to go off into *Braslchen* The sound is attested in an old Ogam inscription at Eglwys Cymun in Carmarthenshire, for it gives the Goidelic genitive of Avitoria as *Avittoriges*. We have a trace of it also probably in Mela's account of Hercules contending 'contra Albiona et *Bergyon*,' two sons of Neptune · *Bergyon* should probably be corrected into *Iberyyon*, better *Iverigon*, meaning Ireland It would seem to belong to a version of the story in which the Sequani or some kindred people, say towards the Bay of Biscay, brought Hercules in contact with the dwellers in the British Isles. Here *ÿ* is used for a more consonantal sound than that of the semivowel *i̧*; for it is found necessary to distinguish between the three stages, *i*, *i̧*, *ÿ*, as perhaps also in the case of *u*, *u̧*, *w*.

the Goidelic *acht*, 'but' ANTIA is made up like *sosio*, to be mentioned presently, of demonstrative particles, AN being of the same origin (1) as the indeclinable *an* functioning as the relative pronoun in Irish, and (2) as the nominative and accusative singular of the neuter of the definite article. In both Irish uses the full form seems to have been the compound *s-an*, differing from the stem *s-ind*, which supplied all the other forms of the article in the three genders. TIA I should regard as having a locative force like the *sio* in *sosio*. Thus ANTIA would be 'this here,' in case one should not rather say 'that there,' unless, indeed, we are to treat the word as related to Latin *ante*, 'before,' and construe ANTIA more simply as that which is before us or over against us POGDE I should treat as made up of a preposition *po* or *pa* prefixed to the preposition *oc*, 'with,' and *de* would be the pronominal termination indicating 'him, it, or perhaps her'. compare the Old Irish preposition *ó* or *ua*, 'from,' which made in the third person singular *ood*, *uad* (fem. *uadi*), 'from him or from it,' Mod. Irish *uaidh* or *uadh*, 'from him or it' (fem. *uaithi* or *uaithe*, 'from her'[1]). The preposition beginning the compound POGDE I should regard as *po*, reduced in Welsh to *o*, 'from'. *po-oc-* would mean accordingly 'away from,' and possibly 'without,' which is provisionally the sense to which I should give the preference. In the next word DORTON I recognize the past passive participle of a verb meaning 'putting, giving, and placing,' to be mentioned again when we reach the Rom inscriptions (p. 117). In the meanwhile it is to be noticed that the Celtic languages have, as far back as we can trace them, been in the habit of using this participle as the finite verb for the preterite passive without the aid of the verb 'to be,' the forms being confined to two, one for the singular and one for the plural, while derivatives were provided for use as mere participles[2]. Accordingly the whole

[1] Celtic prepositions are not all provided with personal terminations, but those that are fall, in Welsh for example, into three conjugations so to say, which imitate verbs in the first person singular and plural, but in the case of DIVERTOMV and DIVERTIOMV, there was some hesitation in the language of the Calendar as to the conjugation In the third person singular (as in POGDE) and plural the prepositions have personal terminations of their own differing from the verb, and even providing for distinguishing the feminine singular from the masculine, not to mention the traces of case distinctions found in Old Irish In Welsh the analogy of the verb has been strong enough to establish forms like *wrthynt*, 'to them, towards them,' instead of such older forms as *urthu*, corresponding more nearly in their ending to Irish *friu*, *foraib*, *indib*, &c. see the *Grammatica Celtica*, pp. 334–36, where instances will also be found of the converse influence of the prepositions on the verb; and as to Welsh *u* see a note in my *Celtic Folklore*, p. 225

[2] DORTON probably stands for *dortton* or *dordton* · the related Old Irish verb is very irregular, and the nearest equivalent supplied by Zeuss is *durat* 'data est';

note might be rendered thus · 'The space of six months the Rex of the T. C. has marked, but this before us here has been put without it into the present lustrum of five years.' That represents the construction of the two sentences, but the meanings of several of the individual words as already suggested are more open to doubt.

TIOCOBREXTIO is one of them, and it may be considered next. This spelling with MD prefixed to it occurs on Simivis 7 in the fourth year it is absent on that day in the first and third years, for both have only D EQVI. the second and fourth years are not available at that point TIOCOBREXTIO is also the reading on Cantlos 15 in the second year, while on the same day in the first year it is *d t*IOCOBRIXTI, and in the third year D TIOCOBREX . . . The portion in point of the fourth and fifth years is gone. The month of Giamon has it, as in the Simivis just mentioned, on the seventh day the third year is the only one intact at this point, and the reading is TIOCBR with D SIMIVI preceding it. In Elembiu it occurs on the eighth day, and reads only TIOCOB as what preceded is lost this is in the third year. The second year has nothing but D on that day, and the other years are not to be got. Those, together with RIXTIOCOB . . ., are all the data, except that TIO RIVRO occurs on Rivros 4, which will be noticed presently. I begin with what seems most certain here, namely that we have before us a word to be equated more or less closely with the Welsh *cyfraith*, Med. Welsh *cyfreith*, Old Welsh *cymreith*, 'law,' for an earlier *com-recht-*, the simpler noun being Welsh *rhaith*, Med. Welsh *reith*, and the Irish *recht*, 'law,' genitive *rechto*, a noun of the *U*-declension. This marks off TIO, and we have to see next what can be made out of it. One of the first suggestions to offer itself is that it is an adverb used in the same way as SINDIV and EXO, to be mentioned presently; but against this must stand for what it is worth the conjecture already mentioned, that RIX in RIX TIOCOB is the etymological equivalent of *rex*, 'king.' So we are forced to suppose TIO here either a part of a compound or an independent noun. In either case we have hardly a choice but to identify it, in spite of the absence of a medial *g*, with Old Irish *teg*, *tech* (genitive *tige*), Welsh *ty*, Old Welsh *tig*, 'a house,' a noun of the same declension as its Greek equivalent τέγος compare such Latin nouns as *genus*, genitive *generis*, and see Stokes's *Celtic Declension*, pp. 34, 104. Now if we treat TIO here as a separate word we get into inextricable difficulties over the declension, not only of that word itself but also of COBREXTIO,

for the more usual *doratad*, *doratuth* 'datus est' seems to have the participial termination affixed the second time. see the *Gr. Celtica*, pp. 71[a], 477[b], 478[a], 999, also Stokes's *Urk. Sprachschatz*, p. 225.

whereas we avoid them by treating TIOCOBREXTIO as a neuter compound *tiocobreχtio-n*, meaning provisionally 'house law.' In that case the genitive of *cobreχtio* should be COBREXTI, into which the COB in the note at the end of the first intercalary month would have to be expanded. The uncertainty here attaches to the meaning of the compound; that is, what did house law or house legislation mean in the Calendar? Possibly we may take TIO as meaning the house of the god, the temple, and that the RIX was the pontifex who had charge of the temple where the Calendar was put up. Perhaps the students of Roman archæology may be able to throw light on this question.

It was not till after these identifications of the words in question had been made, that I discovered that the Calendar affords evidence of a nature to place them beyond doubt. This brings me back to the entry TIO RIVRO already mentioned as occurring on Rivros 4 in the fifth year: the bronze is broken off just in front of the T where there should have been the letters MD as shown by the corresponding entry in the third year. Rivros should be approximately the month of August, and its name, as inferred by Mr. Nicholson, probably meant the harvest month. Here, however, there is no reason to regard TIO as part of a compound rather than as a separate word: it was a neuter, and must once have had a final *s* whether it retained it now sometimes or not. In fact it must have been *tigos* or rather *tegos* both in the nominative and the accusative; and the question in which of the two cases we are to suppose our TIO to be is the next. Why this matters you will at once see if you render it into Latin: is it to be *domus* or *domum*? Clearly the latter: it means literally 'home the harvest,' that is 'the harvest towards home or coming home.' Lest there should be any doubt about it we have the remarkable entry in the first year . . . . . OMV RIVO, which should presumably be expanded into *Ocio*MV RIVOS, meaning '(the harvest god) RIVOS is with us': that is, he was probably regarded as being present and furthering the work of bringing the crops into a place of security. This is not all, for the other years have entries in the same formula as TIO RIVRO: they are all three incomplete but perfectly intelligible, as one of them reads MD BRIC RIV . . . . , while the other two are . . . . C RIVROS and . . . . C RIVRI. Here the C may be the engraver's mistake for G: several instances occur of that mistake in the Calendar, as already suggested at p 83. On that supposition I take the word to have been an abbreviation of the accusative *brigin*, and I translate BRIGIN RIVROS as 'to the burgh the harvest,' that is, the harvest is or should be coming to the arx or fenced hill homestead: in Irish the word was once *brí*, accusative *brigh*, and in Welsh *bre*, a hill or mountain, *fry*,

'uphill' see Stokes's *Urk Sprachschatz*, p. 171. It is needless to say that one cannot be quite certain that Sequanian had not shortened the accusative into *brig* and given the final *g* a *c* sound In that case the engraver could not be blamed in the matter Lastly, the plural RIVRI of one of the entries would have to be rendered 'harvests,' unless we should rather say 'the crops' and treat RIVROS as crop rather than harvest; but the difference does not matter.

As already mentioned, the entry for each day in the Calendar has in front of it the hole for the *clavus anni*. The next thing is the number of the day, from I to XV in the first part of the month and from I to XIV or XV in the ATENOVX according to its length. Looking up and down a month the holes and the numbers form vertical columns: the next regular column consists of the letter D, but sometimes the letter is N; and sometimes the D has before it an M. Here D probably stands for the Celtic word for 'day,' that is the daylight portion of the *láthe* or 24 hours, compare Old Irish *die*, *dia*, Welsh *dyd*, 'day,' which point back to an early *diyes or diyas*. The M stands for *matu*, 'good, lucky,' prefixed to qualify the day; in some instances, as in the first intercalary month, MAT D occurs, and in some also D M, with the order of the noun and adjective changed. N stood for the word for 'night' compare Irish *in-nocht*, 'this night, to-night,' Old Welsh *he-noeth*, 'to-night,' and *nos*, 'night,' for *noct-s*. It is not impossible that, like Welsh, the language of the Calendar had reduced the word for night not only to *nots* but to *nos*. In either case an obscure abbreviation NSDS, which occurs now and then, might be supposed to stand for 'night and day.' Against this, perhaps, should be placed the fact that those four letters sometimes stand alone. Now N, indicating the night, is never qualified as lucky or unlucky; nor is it ever divided into parts as the day sometimes is. Mr. Nicholson compares those cases with the *dies intercisi* of the Roman Calendar. They have here three perpendicular lines (with one longer than the others for the hour of noon) standing between the number of the day and the letters D or MD, thus ııl or lıı, which I take to mean the two hours from 10 to noon and the two from 11 to 1 in the afternoon respectively. In passing, I may mention that it seems by no means improbable that the peg-holes, the numerals, and the columns consisting of D and N were made before the Calendar was filled in; for it is to be noticed that every one of the ordinary months shows days on which nothing further is indicated: that is they show D or N standing alone without any indication of anything happening. The same remark applies with greater certainty to the headings in the bigger lettering, the headlines of the months and the ATENOVX; also the

word DIVERTOMV. Exception has probably to be made in the case of the intercalary months, where greater freedom appears to have been reserved.

Besides NSDS there are in the Calendar other entries which baffle one as to the words intended or the meaning of the words where we have them. One of the former is AMB, which occurs on uneven days chiefly in the latter half of the month, and may come either before or after the weather forecast. thus the third day of the ATENOVX of Edrin has in different years D ELEMB AMB and D AMB ELEMB. The letters AMB would seem to represent some word beginning with *ambi*, 'around, on both sides,' such as the Celtic names, *Ambiani*, *Ambigatus*, also *ambactos*, 'a servant,' Welsh *amaeth*, 'a tiller of the ground.' Whatever the abbreviation meant, it was something which did not belong to the night.

On the contrary something represented by the letter R seems to have happened at night mostly. However that may be, the formula in which it occurs is commonly N INIS R, but it is abbreviated sometimes into N INI R, or still further, N IN R. On the other hand the spelling INNIS occurs on the seventh of the Atenoux of the first intercalary month, where we have an entry reading —

NSDS SAMONI ANACAN
INNIS R . . . . . TIT

Had this been complete we should now have more of the word represented by the R of the other entries. Unfortunately, the next day's entry is even more fragmentary, as there is left only the following :—

NSDS . . . .
INN . . . . TO

These are the only instances where our formula occurs with NSDS, and they rather countenance the conjecture that those letters mean Night and Day To return to TIT and TO, it is probable that we have here an abbreviation of a longish noun ending in *-t-ito* (hardly for an earlier *-t-itio*), and beginning with an R word. What the latter may have been one cannot say, but if it referred perchance to any kind of religious mystery or initiation, some such a vocable may have originally stood there as *rouna* or *rūna*, which is represented in Irish by *rún*, 'a secret,' Welsh *rhin*. But on the whole I am inclined to think the word began with the name of the god Rivos, and that the whole signified a feast given in his honour. The space would suggest some such a possible compound as *Rivo-ves*TITO, which

would mean a *feis* or banquet for Rivos. Compare such entries as '*Iovi Epulum*' in the Fasti of ancient Rome

Now comes the question how the formula N INIS R is to be construed. It is quite simple, the literal equivalent of Latin *est*, Greek ἐστί, is in Irish *is*, and so it used to be written in Old Welsh until it came later to be written *ys* So *inis* or *innis* is of the same meaning as Latin *inest*, and N INIS R is accordingly to be rendered *N Inest R—tito*, whatever the noun meant; that is 'Such and such a Night, on it or in it there is a R . . . . TITO.' Compounds of the verb 'to be' with *in* are rare, however, in the Neoceltic languages I can only recall one, namely, the Old Welsh *en-bid*, which occurs in the *Juvencus Codex* (p. 71) in the Library of the University of Cambridge. There the words *nac enbid* are found glossing *nulla* in the following passage.—

> Laetitia inventae maior tum nascitur agnae
> Quam pro cunctarum numero quod nulla residit.

Nac enbid means 'that will not be in or present,' and forms part of the glossator's rendering of the clause *quod nulla residit* in some such words as *am nat ois oin nac enbid*, meaning 'because there is not a lamb that will not be there.' To return to the formula in the Calendar, it occurs also combined with a weather forecast, for instance, on Samon At. 9 we have VIIII N DVM INIS R, 'Eighth Night, of Dumann (weather): on it there is a R . . . . TITO.' It is just possible that INIS or INNIS was only an abbreviation, and that the full word was *inist* or even *inisti*; but I see no reason to think so. Lastly, the doubling of the *n* in INNIS would seem to show that the accent was on the first syllable and favoured the reduction of *st* to *s*, as in Irish.

We come next to a lunar term, IVOS, which though complete is of a perplexingly obscure origin. it is liable to be abbreviated into IVO and IV. Its signification can only be guessed, and Thurneysen's opinion is that it must have meant something like the Irish *oenach*, an institution which was at once a fair and an agora, and occupied in Irish story the last days of one month and the first days of the ensuing one. So here we have in the fifth year the IVOS of our Calendar occupying the last five days of Equos and the first five days of Elembiu. When an IVOS happens on an isolated day in the month it is usually preceded by SINDIV, liable to be abbreviated into SIND. The meaning is clear, SINDIV IVOS signifies 'to-day (there is) an IVOS,' for *sindiu* can hardly be other than the etymological equivalent of the Irish *indiu*, 'to-day,' which has the same demonstrative element as the definite article *ind-* for an older *sind-*, the *s* of which appears in combinations like Old Irish *isindaimsirsin*, 'hoc tempore' (*Gram. Celtica*, p. 212[a]),

written in Mod. Irish *in-sind aimsir sin*; and even where the *s* has disappeared it seems to have first become *h*, of which we have a trace in the Old Irish spelling *hindiu* (*Gram. Celtica*, p. 609[a]). The Welsh is *hedyw*, 'to-day,' for *he-diw* = *so-diw* with a different demonstrative. The other element, *div* or *diu*, is the same in the two languages, and to be compared with the Latin *diu noctuque*. But the most remarkable thing here is the complete agreement between the Sequanian form and the Irish one: practically, the two languages may be said to have had the same definite article.

That an *ivos* should require special attention drawn to it in the Calendar seems to imply rites with their origin in the cult of the moon. There are two more instances, and fortunately the demonstrative used is another word, and that brings me back to a preposition already touched upon. One occurs on Anacantios 1 in the third year, and the other on Giamon 1 in the fifth year: they read respectively . . . . . RIVRI EXOIVO, which means 'I. A lucky day of Rivros: here is or begins an IVOS.' And . . . . . MIVSEXOIV, which restored would be I MD SIMIVS EXO IV; for another year's corresponding weather forecast shows that the month meant was SIMIVIS, so that one renders the whole 'I. A lucky day of Simivis: at this point begins an IVOS.' In both instances the IVOS to which EXO calls attention is the first of a group of three. They are certain in the case of Anacantios, and probable in that of Giamon, but here the fragment has only two standing, the third day together with most of the month having been lost. Now our word EXO analyses itself into *ec-so*, where *ec* seems to be a modification of *oc* or *ac*: in Old Irish it was *oc*, 'apud,' as already pointed out, while in Mod. Irish it is *ag*, 'with': similarly in Welsh *oc*, now *ag*, 'with,' which, however, never takes personal terminations, while the probable compound *rhag* (=*pro-ag*), 'for, before, i.e. in front of,' is conjugated *rhagof*, *rhagot*, &c. *So* means 'this,' and is probably to be regarded as indeclinable: see the *Grammatica Celtica*, p. 347, and Stokes and Strachan's *Thesaurus Palaeohibernicus*, p. 180. The Irish equivalent is *ag so* (O'Donovan's *Irish Grammar*, p. 263), to which the spoken language prefers *ag seo*, pronounced *aig sho*, which literally signifies 'at this, here, in this place[1],' though it comes to mean 'here is for you, or here! take this,' with a dative hint which was possibly not present to the mind of the

[1] It recalls the Welsh *acw*, pronounced also *yco* and *oco*, but it cannot be identified with it as this means not 'here' but 'somewhere away from here, yonder,' and analyses itself into *oc*, *ac*, and *hu* (for an earlier *su* or *so*), plus a vowel which must have remained between them down to a comparatively late date, for otherwise we should have had *ochw* or *achw*. The dative movement of the *hu*=*su* or *so* makes itself felt in the Welsh word *hwde* 'here, take this!'

maker of the Sequanian Calendar. Nevertheless the correspondence between the word and the Sequanian is most striking, especially as being an instance still intelligible in Irish

There is one more IVOS deserving of special mention it occupies the last day of Cantlos in the first year, and the entry is ||| IVODIBCANT which is to be analysed into ||| IVO DIB CANT. That probably meant 'from 10 to 12 IVOS for or by the Two Hundred,' with the two last words equating with complete precision, as far as the writing goes, with the O Irish dative dual *díb cétaib* in the phrase *ar díb cétaib*, 'ad ducentos,' cited in the *Grammatica Celtica*, p. 307[a]. Such suggestions as comparative philology can make would lead one to complete the abbreviations into *dibin cantobin* those would be the maximum lengths, but Sequanian may have reduced them into *dibi cantobi*. Other interpretations suggest themselves, but I will only mention one of them, and that is to read *dibin cantiobin*, thereby substituting for *cét*, 'a hundred,' *céte*, Mod Irish *céide*, 'a market or fair.' The entry in that case would mean 'Ivos for, by or at two markets.' By the way, this word *céte* would be exactly *Cantion*, and possibly mean that Kent, in Welsh *Caint*, was so called as the part of Britain with which continental merchants traded more directly than any other. With regard to the phonetics it is to be observed that our glottologists treat the Aryan word for hundred as kn̥to-n sounded with a vocal *n* which is represented by *an* here and perhaps in such words as Anacantios. Irish has everywhere modified it before *t* or *c* into *ē* or *ēi*, while Welsh has a presumably older vowel sound and writes the word for 'hundred' *cant*, which is now pronounced with a non-nasal *a*, but hardly so with the Breton form, which is written kañt The same remarks apply to the other words in point. Lastly, it is needless to say that I have no suggestion to make as to the Two Hundred, in case that interpretation is preferred: they may have been a parliament of 200 or else what we should rather treat as two cantons.

Indeed we seem to have the name of one of the two, for the first year has another IVOS, namely, on Samon 3 in the entry ||| D EXINGIDVM IVOS where I take GIDVM to be an abbreviation, as I do also EXIN. The marks at the beginning seem to indicate the two hours from noon to 2 o'clock, and we translate accordingly, 'From noon to two o'clock with the GIDVM there is an IVOS,' that is to say, the GIDVM has an IVOS on those hours. The entry in the following year looks as if it had never been filled in, as it reads ||| DVM IVO M. Dissard leaves a gap. The fourth and fifth years are gone, but there remains the latter part of the entry in the third (? fourth) year, and it is MELE IVO, which at first

glance suggests GIDVM. ELE. IVOS with ELE standing for the month Elembiu. But that month nowhere else has its name so abbreviated, and it is too far away to have been fetched here. It may be taken also that the engraver, perhaps a Roman, as Mr. Nicholson suggests, did not understand the entry in which he left the blank, but thought that he recognized DVM for the usual month DVMANN. On the whole I infer that in the entries on the third of Samon in the different years neither the month Dumann nor Elembiu had any place at all Then what did . . . . MELEIVO mean? The answer is suggested by the complete entry EXIN GIDVM IVOS, 'with or by the GIDVM there is an IVOS,' for here also EXIN was probably present in the original. So I translate 'With the second (or the other) GIDVM an IVOS,' that is the second G. has an IVOS. But perhaps one might construe GIDVM. ELE as a place-name and translate 'at the second G.': it practically comes to the same thing. It looks in fact as if the tribe consisted of two centuries or two cantons, and that both had the name GIDVM., let us say *Giduma* or *Gidumia* in full, and that the Samon entry had to do with the second Gidumia, or better, that one of the cantons was called Gidumia, and divided into *prima* and *secunda*. A word now as to the name GIDVM its origin is obscure, but according to the orthography followed in the Calendar it might probably be as correct to spell it with *e* as with *i*; but even then I know of nothing for certain to compare it with, unless it be a man's name, *Gedemo*, genitive (Latin) *Gedemonis*, occurring in an inscription from Saintes quoted by Holder in his *Altceltischer Sprachschatz*, and possibly the name of the Geidumni mentioned by Caesar (v 39) as one of the tribes subject to the Nervii in Belgic Gaul If one felt safe in taking this clue one might suggest completing the abbreviation, not into Gidumia or Gedumia, but into *Gidumnia* or *Gedumnia*. In any case preference is here given to the feminine singular because on the whole ELE seems to point to it. This word is in Mod Irish *eile*, 'other,' Sc Gaelic *eile*, Manx *elley*, Welsh *ail*, Med. Welsh *eil*, 'second, *alter*.' In Old Irish there were several forms, namely *aile* (with a neuter *aill*) as in *ind-aile*, 'the second (in the feminine),' also *éile* or *éle*, and *ala* in *ind-ala*, 'one out of two,' usually the first mentioned of the two as in *ind-ala fer . . . alaile*, 'the one man . . . the other' Later this became *ind-ara*, and in the modern language *an dara*, 'the second, the next' · see the *Grammatica Celtica*, pp. 358–60 and 309. Of the same origin is the *all* of Welsh *arall*, 'another,' Old Irish *araile*, neuter *araill*, and the same is the case with *all* as a prefix in words like Welsh *alltud*, 'one of another *tud* or people, a foreigner,' and *allfro*, 'one of another *bro* or march,' identical in fact with the name by which the *Allobroges* were known

to the Romans. For, like the Greeks, the Gallo-Brythonic peoples reduced *lį* into *ll*, and forms like the Old Irish *aill* would seem to suggest that the other Celts sometimes did the same. But there was another stem with *lį*, the *į* of which exercised influence on the vowels in its immediate neighbourhood; so in Brythonic the changes may be represented somewhat as follows at their successive stages, *alįo-s*, *elįo-s*, *eilįo*, *eil*, *ail*. In early Goidelic the stages are less certain, but they may perhaps be represented thus, *alįo-s*, *elįa-s* or *ailįa-s*, *ele* or *aile*[1]. We seem to be on firmer ground when we come to the dative-ablative and locative cases of the feminine singular, for Stokes ('Celtic Declension,' pp. 17, 18, 102) quotes Irish instances of these cases of the *įa* declension ending in *e*, such as *cobre*, 'cupidine,' *felire*, 'codice,' and *sláne*, 'fully,' literally 'in or with fullness'. compare IN ALIXIE 'in Alisia,' p. 118 below. With these our ELE, which is probably in the locative, exactly agrees. So the entry might be expanded into *Ec sinde Gidum[n]e ele ivos.*

Another kind of entry—confined to the first nine days of the month—is PRINNI LOVD or PRINNI LAC, sometimes followed by IVOS and sometimes preceded by a weather forecast· but the usual abbreviation D (or MD) and N are wanting. This, however, was probably the case for no more profound a reason than that the line was apt to be crowded, and the first engraver, if we are to suppose more than one, must have been instructed to leave the whole line blank after the numeral. The first question is whether these words belong together. It is easy to guess that the weather forecast and IVOS were independent parts of the entry whenever they occur together. As to PRINNI LOVD and PRINNI LAC, it is much more difficult to decide: on the whole I am inclined to take the words as in no close syntactic relation to one another.· This seems to be corroborated by an instance on Cantlos 4, which reads PRINN. N. LAC, which seems to mean that what was represented by LAC took place at night, and possibly the same explanation is to be applied to Samon 7, where we have PRINI LOVD N. Did we know what these words or abbreviations meant, we should probably find it easy to decide their relation here to one another. As it is, I should regard them as brought together only by reason of their representing different events of one and the same day. A word now as to the spellings: PRINNI is also given with one N, abbreviated PRINN, PRIN and PRI. The word appears to be the plural of PRINNO or PRINO —both spellings occur: they probably represent a nominative *prinnos*, and I should take it to mean 'a giving away, a sale,'

[1] But see Zimmer, loc. cit., pp. 3-5.

of the same origin as the Irish verb *renim*, 'I give.' Stokes, *Urk. Spr.* p. 56, refers this to an original [p]rnô and quotes Old Irish forms, such as *riat*, πρίωνται pointing to the Greek present πέρνημι 'I sell,' as etymologically the same verb. This leaves it uncertain whether *prinnos*, *prinni* meant sales, a market or fair let us say, the distribution of public doles, or the awarding of prizes. The spellings LACIT, LACE, LAC, LA occur, but I can make nothing of them except that LACE seems to imply a variant *lacet* for LACIT—the interchange of ĕ and ĭ is frequent in the Calendar. It has been suggested that LOVD represents a word like the Latin *ludi*, and that we have here to do with public games, spectacles, or exhibitions. So far as I can see that would fit very well. The abbreviation LOD occurs on Dumann 1 of the third year, while the previous year has on that day the form PRIOVDIX, which Thurneysen, loc. cit., p. 528, would analyse and correct into PR. LOVDIX or PRI. (L)OVDIX, but *lovdix* looks hardly more promising than a borrowed Latin *iudex*.

There remains another kind of instance of the *prin* formula: I say 'another kind,' as this has the day marked with a D the first time it occurs, and with MD the second time. the dates are Samon, At. 2, in the fourth and the fifth years, that is the seventeenth day of that month. They read D PRINI SAM SINDI and MD PRINO SAMON and suggest the question why Samon, the name of the month, should be mentioned at all, opposite any one of its own days. The answer is evident: Prino or Prini Samoni was the name of the sale or sales, fair or fairs, neither more nor less; and it was evidently one of the principal events of the whole Calendar. Contrast SINDIV IVOS, 'To-day there is an IVOS,' and PRINI SAMONI SINDIV, 'The June sales, doles or prizes are to-day,' that is, the event of which everybody knew, and to which everybody looked forward the contrast is brought out with precision by the different places which SINDIV takes. This is not all. the first and second years have a very interesting entry on the same day—in the third it is lost; for the one reads MD TRINO SAM SINDIV, and the other ııı (? M) D TRINVX SAMO. Here TRINO and TRINVX suggest that there was a spelling TRINOVX as in ATENOVX, and we are faced by the same query as in the latter case: should we regard the full word as *trinoux* or *trinouxtion*? The latter is decidedly preferable, for *trinux* would be a form of impossible composition, not to mention that if one were inclined to see in the latter part of it the equivalent of Latin *nox*, it ought, according to Celtic analogy, to be *trinuts* rather than *trinucs* see pp. 79, 88 above. In any case we have here the same reckoning by nights as in the ATENOVX, but in modern phraseology we may call

it a period of three days, 'the Three Days of June,' and the meaning of the application of the adverb *sindiu* to it was probably to mark the date on which the trinoctium began. Whatever else happened on these days it is clear from the entries in the two other years that one of the chief things associated with them was PRINNI, great fairs or markets, but for further light on them we have to cast about in Irish story. Taking a cue from our TRINVX I turn first to Dinneen's Dictionary and there I find this. *Tréana*, 'thirds, a triduum, *treana na Cingcighse*, the three days before or after Whit-Sunday, especially three days of prayer or fasting; the Rogation Days. See *tréadhan*.' Under that word one reads 'a fast for three days; the ember days', and O'Reilly gives *treanadh* as 'the week from Thursday before to Thursday after Whitsuntide', and to carry it further back, one may consult Stokes's *Calendar of Oengus*, p. cccxxv, where he gives *tredan* as 'a three days' fast' I mention these entries on account of the number three which they involve, and I turn next to the Irish story called the 'Sickbed of Cúchulainn,' which begins as follows in the *Book of the Dun Cow*, written before the year 1106: 'There was an oenach which used to be made every year by the Ultonians, even three days before Allhallows and three days after it and the day of Allhallows itself. This was the length of time that the Ultonians used to be there, in the Plain of Muirthemne, engaged in celebrating the oenach of Allhallows every year; and there was nothing in the world that was wont to be done by them in that length of time except field-games and bargaining and fine show and pleasure and eating and feasting. It is from this the *trénæ* of Allhallows[1] are so called

[1] In Irish the term is *trénæ Samna*, so I was startled by the similarity with TRINVX SAMON and began running through the months with Samon as the equivalent of November until I found that Giamon, the month whose name means winter, would fall in May · I proceeded no further, but turned aside to examine what is believed as to the origin of the word *Samain* or *Samuin*, genitive *Samna*. As the result I came to the conclusion that the old explanation is substantially correct, which treats the word as *Samfuin*, a spelling as old at least as the *Book of the Dun Cow* (p 44 a), and makes it mean the end of summer, that is of the summer half of the year. The first part of the compound readily connects itself with *sam* and *samrad*, 'summer,' and the difficulty has been the element that should mean 'end' It proves to be from a stem, *van*, which is well represented in Welsh in such words as *gwan-u*, 'to thrust, to pierce or stab, to run through with a spear, to kill,' *gwanaf*, 'a cut of hay in carving a rick (S Wales), in mowing (N Wales)'; the *t* preterite of *gwanu* is *gwant*, 'stabbed, slew,' and there is a noun *gwant*, 'a cutting or section,' which has come down in Welsh metric as the equivalent of the Latin *caesura*: see *The Englyn*, pp. 125, 141-3. So the compound *sama-vani-s*, genitive *sama-vanў-as*, implied for early Goidelic, may be said to have meant

throughout Ireland.' The word *oenach* means an assembly or reunion, and was usually held in the great burial places of ancient Ireland in honour of the dead, and it was an occasion for putting on fine clothes, for horse-racing, and for all kinds of amusement and entertainment, including the hearing of stories related by the professional men of Erin. It was incumbent on all to attend they were promised prosperity for doing so and threatened with misfortune if they did not[1]. The word *trénæ* is the same as the modern *treana* and evidently closely connected with the Irish word *tri*, 'three,' and practically the equivalent of the TRINVX of the Calendar. But the Irish pagan festivals and fairs attached themselves (1) to the end of the summer half of the year and the beginning of the winter half, the *trénæ* or *oenach* of Allhallows or Samain, (2) to the beginning of the summer half, the Calends of May or *Bealtaine;* and (3) to the beginning of August or the day called Lughnasadh. Their year was a November-May year and not a solstitial one; so we have in the folklore nothing to show corresponding to the trinoctia of the month of Samon of the Sequanian Calendar, except a probably similar reckoning, and that is a point of interest as I am going to show. Now the *trénæ* of Allhallows were reckoned the three days before Allhallows, Allhallows itself as the central day of the group, and the three days after it: apply this to Samon, and the trinoctia would reach the eighth day of the ATENOVX or the twenty-third day of the month. But we are not bound to take for granted more than one trinoctium: that, beginning with the seventeenth day of Samon brings the reckoning up to the nineteenth; so the twentieth should be the day to which the three days were intended to lead up. But what did the twentieth signify, it will be asked, and the answer seems inevitable: if Samon was approximately June, it must have meant the summer solstice—the twentieth is near enough to the twenty-first to permit our thinking so. This would seemingly

the division or *caesura* made in the series of the months at the end of what was reckoned the summer half of the year. But why has a gloss-writer in the *Lebar Brecc* explained *samfuin* as 'bas intsamraid' or 'the death of the summer'? The prevailing signification of the Welsh words indicates the answer. they connote slaying The author of the gloss was probably not drawing on his imagination so much as on a tradition, which, among other things, perhaps represented the summer god, after six months of conflict, put to death by the dark powers of winter. This would give more meaning to the statement in the *Book of the Dun Cow* (fo 52 a) that *Samain* was the Easter of the pagans of ancient Erin. see Stokes's *Calendar of Oengus*, p. clxvi.

[1] For some idea of this kind of fair see Stokes's *Patrick*, pp. 278, 279, and the poems translated by O'Curry respecting the fair of Carmán, now Wexford, in his *Manners and Customs of the Ancient Irish*, ii, 38–47.

be the case at least twice in the five years, namely, in the Samon o June immediately following the first intercalary month and in th June of the year immediately following the year containing th other intercalary month. So the Sequanian year had come unde a Mediterranean influence which does not appear to have affecte the folklore of the west of Britain or of Ireland till the coming of the Romans. As regards the framing of the Calendar we seem to have evidence here that the Sequani were in the habit of settling the date of the Samon solstice or longest day by actual observation, and possibly also that of the winter solstice, though we read of nc feast or fair to call attention to that day. However roughly done, their astronomical fixing of the solstices would seem to account for their placing the intercalary months immediately before Samon and Giamon, the months to which the solstices belonged.

It is now proposed to go rapidly through the twelve ordinary months in order to notice their names more in detail, and to call attention to any entries which have not already been sufficiently discussed.

1. Cutios or Qutios (November). The first question which the name of this month suggests is whether the *q* has any special right to be here, and whether Qutios is a contraction of some such a longer form as Quotios or Quatios, from the same origin as the Latin verb *quatio*, 'I shake, shatter or batter.' If so, one might regard it as related also to the Welsh word *pyd*, 'dangerous, danger,' whence *enbyd*, 'dangerous, perilous.' In both the idea was originally perhaps that of 'shaking, storming, raging.' So the name Qutios may have had reference to the storms in November, with which one may, roughly speaking, equate the month. The declension of the word is the next point to discuss · *Cutios* only occurs in full in the heading, the more usual form is *Cutio* or *Qutio* The genitive should be *Qutii*, but no *ii* is to be found in the Calendar, so it would probably be *Cuti* or *Quti*, but it is useless to look for it, as the word is, as pointed out by Dr. Thurneysen, an adjective, and where CVTI or QVTI does occur it is probably to be treated as an abbreviation for Cutios, Qutios. One such occurs in Anacantios on the eighth day of the ATENOVX in the fourth-year column, whereas in the first-year column it is CVTIO, for the nominative Cutios. Another instance comes in a remarkable entry opposite the second day of the ATENOVX of the second intercalary month · the reading is MD QVTI IN OGR where the OGR stands probably for Ogronio, and the meaning seems to be 'A lucky day of Qutios in Ogronios.' On turning to the month Ogron of that year one finds that no less than six of the Qutios days are borrowed for

it, and here the intercalation borrows one of those borrowed days. There can be in this instance no question of a nominative plural *Quti*

2. GIAMONIOS (December). This form of the nominative is a conjecture, for the one heading of the month which is intact gives only the abbreviation GIAMON. It comes in the third year. The previous one has only .... ON in M. Dissard's reconstruction, and ONI in M. Espérandieu's table, while the fifth year has ... MOM, which must be a mistake of the engraver's for either GIAMON or else GIAMONI. On the whole I am inclined to the latter, and to regard the whole name as Giamonios. Occurring as a weather forecast it is variously GIAMONI, GIAMON, GIAMO, GIAM, GIA; and I take GIAMONI to be the full genitive.

3. SIMIVISONNIOS (January). The longest spelling of the nominative in the heading is SIMIVIS, but in the other months we have SIMIVISON (in Giamon 1), SIMIVIS, SIMIVI, SIMIV, SIMI, also SIMISO (Equos, At. 6), besides forms with E in the first syllable, such as SEMIVIS in Equos. Lastly *Si*MIVS or *Se*MIVS on the first day of Giamon is a somewhat unusual abbreviation, but see the footnote to p. 75 above. Most probably the genitive was in full SEMIVISONNI or SIMIVISONI. The doubling of the *n* in SIMIVISONN (in the 2nd Intercalary month, At. 6) indicates the blocked nature of the *o* of *Simivisòn-ịos*, genitive *Simivisòn-ịi* or *Semivisòn-i*, a rule of pronunciation which prevails in the accented syllable, for instance, of Welsh words in point. If we strip the word of its ending *onnios*, we have left a stem *semivis*, the meaning of which is a desideratum. The following conjecture is offered till a better one suggests itself: treat *semi* as represented in Old Irish by *séim*, 'exilis, macer,' and *vis* unaccented as a reduction of *vest-* of the same meaning as Irish *feis*, 'eating, a meal,' Welsh *gwest*, 'an entertainment.' So the month would be that of low feeding or scanty fare, as the supply of winter food might be commencing to run very low The later sense of *séim* is somewhat different, and *séimh* is now given as meaning 'mild, delicate, smooth, calm,' and so the possible Welsh equivalent *hoyw*[1] is explained by Dr. Davies as 'cultus, concinnus, elegans,' now usually employed in the sense of sprightly and cheerful. These later uses of the word both Irish and Welsh develop, as it appears, the more attractive aspect of exility and meagreness. It is called a lucky month in the heading, but it gives one the impression of having been regarded, nevertheless, as rather a sad one, for it is

[1] This would make impossible Dr. Stokes's proposed etymon *s(p)eimi-s*, 'thin': see his *Urkeltischer Sprachschatz*, p 295, also Thurneysen's *Keltoromanisches*, s.v. *scemo* (p. 78).

remarkable that somewhat more than one half of it consists of days borrowed from the unlucky month of Equos (February), not one of those loans being marked lucky. It has an obscure entry in the first year, namely on the fifteenth day, which seems to read . . . . IS EQVI · what was the word of which we have only IS? Two of the other years have the day intact, and the entry in both is simply D EQVI, which does not help one to answer. On the whole I am inclined to suppose the reading to have been D SIMIS EQVI, which would mean a day partly of the weather of its own month and partly of that of the next. An exact parallel occurs in Ogron, At. 8, where we have that day described in the fourth year by an entry OGRO QVTIO, meaning that it had partly the weather of its own month and partly of the next month Qutios. Compare also SIMIVISON GIA on Giamon 1 in the third year.

4. EQUOS (February). This name would seem to equate with the Latin *equus*, 'horse,' which was in Gaulish *epos*. That EQVOS is not an abbreviation but the whole word seems to be proved by the numerous entries with D EQVI, 'a day of Equos,' in the preceding month; and that form of words serves also to show that it was not an adjective, which does not favour the view that it is a word to be equated rather with the Latin adjective *aequus*. Why the month should have been called 'Horse' one cannot tell, but the name of the next month may, perhaps, be compared. There is one remarkable entry in this month which has not been already mentioned, and that is MD SEMICANO on the fifteenth day of the first year, where we have a day of Semivisonnios followed by the letters CANO. The two previous days have also MD SEMIVIS, and I take it that CANO does not require to be construed in immediate connexion with what precedes, that is to say, I should regard it simply as something which happened on that day without any regard to the weather; but what? The only Irish word which seems to be in point is *cáin*, genitive *cána*, 'law, canon, rule, statute law': in Mod. Irish it seems to mean also 'a fine, a rent or tribute,' and perhaps in the Calendar it referred to a public assessment of some kind. In that case I should say that CANO was the first part of a compound, meaning, let us say, rate-assessment or rent-fixing. The engraver had left himself no room for another letter, otherwise we might possibly have had a longer piece of some such a word as CANOCOBREXTIO.

5. ELEMBIVIOS or ELEMBIVOS (March). The longest spelling of the name is ELEMBIV in two of the headings, and the shorter abbreviations are ELEMBI, ELEMB and ELEM. It is mere conjecture that the nominative was in full Elembivios or Elembivos, with a genitive *Elembivi*, but it is more according to the analogy of the other month names

than *Elembivis* or *Elembios* would be. As to the meaning of the word, Mr. Nicholson (loc. cit., p. 123) has equated it in part with the Greek month name Elaphebolion, which is supposed to have corresponded to the latter part of March and the former part of April, and in support of his suggestion he mentions the fact, that the red deer on Exmoor begin to be hunted about the 25th of March. The Celtic words in favour of this conjecture are Irish *eilit*, 'a hind,' and Welsh *elain*, 'a fawn.' This, if sound, would suggest that there was a Celtic word for the male of the deer kind, *elembos*, corresponding to the Greek ἔλαφος; on which see Brugmann's *Grundriss*, ii. § 78. The termination *-ivio-s* or *-ivo-s* might be compared with that of *Vergivius*, in Ptolemy's *Geography* Οὐεργιούιος (Ὠκεανός), as compared with the Irish words *fairrge*, 'a sea or wave, brine,' and *fearg*, 'anger, wrath, fury.' See the *Grammatica Celtica*, pp. 11, 783, where one will find cited also the names *Dexsiva*, *Dexsivia*, *Sulivia* and others.

6. Edrinios or Aedrinios (April). The longest spelling of this name is AEDRINI, once in Cantlos and once in the second intercalary month. The other form in the heading is EDRINI thrice, and EDRIN once: D or MD EDRINI occurs so often in Elembivios and Cantlos as to suggest that EDRINI was the full genitive, and that it was treated as a noun, not as an adjective. Unfortunately the structure and origin of the word are obscure, unless it prove to come from the same etymon as the obscure Irish word *eithre*, accusative *ethri* in *ethri n-Auguist*, 'end of August,' quoted with references in Windisch's *Irische Texte*, p. 521. In that case it would mean the last month of its half year, or else the last month of the year if we suppose it to have been regarded as beginning with Cantlos, that is May. This equation would require one to suppose the spelling with *ae* to be due to Latin influence.

7. Cantlos (May). The name occurs so in the headings of the five years, and the genitive is CANTLI, sometimes abbreviated into CANTL. The word is derived from *can-*, 'to sing,' and the Celtic words to compare are Irish *cétol*, *cétal*, *cétul*, 'song,' Welsh *cathl*, of the same meaning and origin, namely, an early neuter *cantlo-n*. From this there was a Brythonic derivative *cantliĭjo-s*, which in Welsh appears as *cethlyd*, 'a singer, a songster, especially the cuckoo': there was another derivative, which occurs in Old Welsh with the *n* retained, *centhliat* (that is *centhli̯at*), and less correctly *centhiliat*, both glossing 'Dauida canorum,' referring to the psalmist, in the *Juvencus Codex*, pp. 7, 49. The form *cantlon* looks so completely neuter that it is hard to believe there was a *cantlos*. it is rather more likely that our *Cantlos* is a reduced form of a derivative *Cantli̯os*: compare

DIVERTOMV and DIVERTIOMV, the latter of which occurs once, and approaches the original stem which Stokes gives as *vrti*, 'against, towards[1].' Be that as it may, the question which next suggests itself is, why the month should have been called by a name meaning singer or songster. The most natural answer is that it was in reference to the singing and warbling of birds, more prevalent at that time perhaps than in any other month. It may, however, have been so named, not so much in reference to song birds as to some festivity or rejoicing on the part of men and women, for on looking down the column of the first year one finds opposite the seventh, the eighth and the ninth days the entry D CANTLI, which doubtless means either the Day of the Singer or the Day of Song. Possibly they were days when hymns to the divinities of the tribe were presented to them in their temples. Compare the Gaulish inscription from Volnay in the Côte d'Or, which states that 'Iccavos son of Oppianos made a *cantalon* for Brigindo': see Stokes's *Celtic Declension*, p. 67. *Cantalon* means no edifice, and is probably nothing else than the Gaulish form of the word *cantlon*, here signifying simply a hymn made in praise of a goddess named Brigindo. The month is marked unlucky, and is held to be still more or less so for weddings, at least in Scotland

8. SAMONIOS (June). Only two of the five headings are intact, and they give only SAMON and SAM, but the entries D or MD SAMONI occurring in other months give the probable genitive at its full length. The name has been remarked on already, as have also most of its more interesting entries. It remains to mention a singular one on the eighth day of the first year: it is merely MD MO. Here MO can hardly be the equivalent of the Irish *mos*, 'soon' in the day, that is to say 'early,' for its full form would have been probably written *mox* like its Latin congener. The Irish adverb is found also reduced to *mo*, but that is hardly to be expected at the date of the Coligny Calendar. So perhaps what was intended was some longer word, corresponding, let us say, to the Irish *moch-thráth*, 'the dawn of day': in that case the entry would mean that the day was a lucky one at the early dawn.

9. DUMANNIOS (July). Here the spellings are DVMANNI (also DVMANI), DVMAN, DVMN, DVM. The usual entry D DVMANI seeming gives the genitive at its full length. The spelling with *nn* is probably to be explained in the same way as the *nn* in *Simivisonnios*: see p. 99 above. The meaning of the name eludes me, but compare the Med. Irish word *duma* (from *dumio-*), 'a mound, tomb, or tumulus.' Can it have meant a season for visiting and repairing the tombs of the departed?

[1] See, however, footnote 1 on p. 85 above.

10. RIVROS (August). The full nominative is RIVROS abbreviated into RIVR; genitive RIVRI, sometimes abbreviated also into RIVR. At first sight it looks as if one might interpret this name as meaning the 'fat' month, by referring it to the same origin as the Irish word *remor*, 'thick, fat,' and its congeners, but on the whole it is more probably derived from the same origin as Rivos, the name of the harvest god that figures in its columns this would suggest interpreting it as the month of Rivos. Some of the entries, however, in the course of it and the next month, Anacantios, compel us to render it simply harvest or crop: briefly, Rivos was the harvest god, and Rivros was (1) harvest itself, in which sense it had a plural RIVRI; and (2) the month in which the harvesting principally took place. The first of the entries to which I refer belongs to Rivros 4, but they have already been discussed · see p. 83, above. Then comes Rivros 13 with the following entries in the three years where we have any reading left —first year, DEVVO RIVO RIVR . ., second year, ... IVC RIV; fourth year, ... IV . C . RIVRI. The first was probably in full DEVVO RIVO RIVROS, where the last word seems to have been written RIVRO or RIVROS: it is remarkable that DEVVO begins where the number of the day, namely, XIII, should have been. That number is consequently wanting, and its absence has no parallel anywhere else in the twelve ordinary months. The engraver was hard up for room, and that in the case of an unusual entry, so the number was omitted, and when he came to VV he put one as a wedge into the other so that they only took up the room of one The fourth-year entry was probably in full MD RIV C . RIVRI, and in the light of it one may guess the second to have been MD RIV C RIVRO (for RIVROS). But according to M. Espérandieu's table his reading was . . . . . RIVO RIV . . . with O (not C), which is countenanced by . . IVO (probably for RIVO) in the next line, just below where M. Dissard reads IVC. In case one takes M. Espérandieu's first reading the C would have to be considered as not represented in the entry for the thirteenth of the second year, as that letter would have then to be treated as an O, helping to make MD RIVO RIVROS. The three entries would mean respectively .—first year . 'To the god Rivos (is offered) the harvest', and fourth year 'To Rivos (are offered) the firstfruits (?) of the harvest'; while the second-year entry would have to be rendered in the same way, or else, 'To Rivos (is offered) the harvest.' For all three would seem to imply that samples of the harvest figuring on the fourth day are dedicated on the thirteenth to the god Rivos. I have ventured to suggest that the undoubted C in the fourth-year column stands for some word meaning *primitiae*, 'firstfruits', should

that prove sound there would be no great difficulty in guessing what the actual word may have been. Take the Old Irish words for 'first'. they were *cét-* and *cétna*, the latter of which postulates an early form *cantanio-s*, neuter plural *cantania*, derived from a shorter form *cantano-s*, *cantana*, respectively. The latter seems to have its exact equivalent in the Gaulish neuter plural KANTENA, as for instance in the Nîmes inscription ΚΑΣΣΙΤΑΛΟΣ ΟΥΕΡΣΙΚΝΟΣ ΔΕΔΕ ΒΡΑΤΟΥΔΕ ΚΑΝΤΕΝΑ ΛΑ . . . . . which may be rendered into Latin *Cassitalus Versi filius dedit ex voto* (or *ex imperio*) *primitias La* . . . . . Here and in the other cases—if they are Celtic at all—where KANTENA occurs (Stokes, loc. cit., pp. 63, 65, 66), the word need not mean firstfruits of the harvest, as it might perhaps mean the first profits of anything undertaken with success by a man who wished to be grateful to his god.

To the identity and history of the god Rivos of our Calendar I have no clue, but the Irish story of the Death of Eochaid mc Maireda in the *Book of the Dun Cow*, p. 39, has a personal name Rib, genitive Rí, probably for *Riv(os)*, genitive *Ri(v)i*. Rib is represented as son of a king of Munster. He set out with all his following of men and cattle to seek a district in which to settle, and came to the place now occupied by Loch Ree, for there was no loch there then; but one day a magic well, the origin of which is given in the story, burst forth and drowned Rib's people and formed the lake called after him, Loch Rí: it is an expansion of the Shannon between Co. Roscommon and the Counties of Westmeath and Longford. The story is of a very ancient order, but it does not help us to any attributes of Rib's. Possibly Rivos was a local name of the great Celtic god Lug or Lugus; for it is he that dominates in Ireland the month of August to which our Rivros should correspond. The first Monday in August is said to be the date of the Fair of Tailte, now called Teltown, in Meath, and Lug is supposed to have established that *oenach*, or fair, in commemoration of his foster-mother Tailte. It is usually called Lugnassad, 'Lug's commemorating games or fair,' as Cormac interprets the term it is now the name for Lammas-day, but it is found also called the *trénæ* or *trinoctia* of Tailten. See p. 97 above, also O'Curry's *Manners and Customs*, i. pp. cccxxvi–viii, dcxli, ii. p 148, *Revue Celtique*, xv. 317, xvi. 51; Stokes's *Cormac's Glossary*. p. 99, and for some account of this festival in the Isle of Man and in Wales see Rhys's *Celtic Folklore*, pp. 312, 313.

The fourteenth day of Rivros has already been mentioned as having in the second-year column . . . . IVO . . . , the whole line was probably as suggested RIVO RIVROS with or without MD preceding it. Now in the fourth-year column we have the end of an entry which

most unexpectedly reads MAT, and below it in the line for the next day we have NS; and there is so much left of the fragment as to show that those letters stood alone. So MAT must apparently mean that the fourteenth or the morrow of the offerings to the god Rivos was particularly lucky; but what NS in a similar position on the ensuing day may have exactly meant I cannot say.

We now come to the ATENOVX of the same month, on the eighth and tenth of which we have the following entries in three of the years.—

(1) Second year, eighth day: . . . . . IVX ANAC, that is D PETIVX ANACanti.

(2) Third year, eighth day: D PET RIVRI ANAC, that is D PETiux RIVRI ANACanti.

(3) Fifth year, eighth day. . . . . . . IVRI ANAC, that is *D PETIVX RIVRI* ANACanti.

(4) Second year, tenth day · III MD PETIVX RIVRI.

(5) Third year, tenth day: N *R*IVRI D RIVRI III M.

(6) Fifth year, tenth day: . . . . VRI.

The last is too fragmentary to restore, as one would hesitate to regard it as a copy of the very unusual entry here numbered (5). In the latter M. Dissard has between RIVRI and RIVRI a reversed C which one would read as *con*; but, on the whole, I am inclined to treat it merely as an imperfect D. Taken in that way it will appear that the whole *láthe* or day of twenty-four hours was divided into night (N) and daylight (D), a part of which—from ten to noon—was lucky (M). The whole would then mean, 'Night of Rivros, Day of Rivros, from ten to noon lucky.' The contrast is partly between the day and the night, which comes before the day as one would have expected on Celtic ground, but it is never marked lucky or unlucky; partly also between Rivros (lucky) and Anacantios (unlucky) as in entry (1). The division of these days, after the manner perhaps of Roman *dies intercisi*, comes to a clearer expression in Nos. (2) and (3), where one has to translate, 'Day of Rivros and of Anacantios, a piece of the one and a piece of the other.' Compare the day of Ogron described, p. 100 above, as OGRO QVTIO, that is partly of the weather of its own month and partly of that of the next. But entry No. (4) is somewhat peculiar in mentioning Rivros, to which it should naturally belong, without mentioning another month, such as Anacantios. One might have expected, perhaps, after qualifying the day as partly lucky (MD), and after specifying the hours meant as the two from ten to noon, that Anacantios should have been suggested as covering a portion of the day in question.

What are we to make of the term PETIVX is the next question:

is it the whole word, or are we to regard it as standing for some longer form? As we have the abbreviation PET it looks as if the PETIVX used twice in the second-year column were to be regarded as the entire word. In that case, the ending VX at once reminds one of the κάρνυξ, a musical instrument mentioned by Eustathius as being so called ὑπὸ τῶν Κελτῶν see Holder, s. v. The rest of the word PETIVX is probably to be referred to the same origin as the old Sc. Gaelic *pet*, genitive *pette*, meaning 'a division, a portion,' as to which see Stokes's *Goidelica*, p. 120[a], where he has added Irish *pit* (in *tei c-fit*, *leth-fit*), 'a portion of food.' It was a word perhaps borrowed from the Gallo-Brythonic dialects, for the Welsh is *peth*, 'a thing, a certain amount of anything,' Old Irish *cuit*, genitive *cota*, 'a share or portion'. It was at any rate borrowed into Late Latin, where it gave rise to French *pièce*, Italian *pezza*, *pezzo*, and other Romance forms. But whether one may or may not treat *petiux* as of Gaulish origin, I venture to regard it as meaning a piece or portion, perhaps a little portion; for the termination may have been diminutival in its force. In any case we seem warranted in interpreting such an entry as D PETIUX RIVRI ANAcanti as a day consisting of a piece of Rivros and a piece of Anacantios.

11. ANACANTIOS (September). The spellings in the heading are ANACAN and ANACTIO, but in Rivros we have D ANACANTIO four times and once ANACTIOS, doubtless an equivalent for ANACANTIOS This seems to be an adjective like QVTIOS, and the genitive should be ANACANTI. The meaning of the word eludes me, but it possibly refers to a meeting of the Hundreds or Cantons after the harvests; and I would recall what has already been said as to the fourth day, which has the entry *Ociomu Rivri*, 'the harvests are with us,' i. e. 'we have the harvests.' The three years, where this is preserved, show the noun in the plural RIVRI, which means that by that time more than one kind of harvest had been secured; for this would be just thirty days from when a harvest or harvests should be coming home on the fourth of the previous month: see pp. 87, 103, above.

12. OGRONIOS (October). Only one of the headings is intact, and it is only OGRON standing for Ogronios or perhaps Ogronos. We have in other months frequently MD OGRONI, in which we seem to have the genitive of the name used as a noun, not an adjective; one of them occurs in the second intercalary month, where we have D OGRONI QVT; but on the last day but one of that month we read ııl D OGRONV, of the V of which I can make nothing except an error of the engraver's, which is also Thurneysen's view, expressed without any hesitation, loc. cit., p. 532.

Having run through the twelve months I have an object in recapitulating the names such as they have been guessed to be when spelt at length :—

THE WINTER HALF.		THE SUMMER HALF.	
First Quarter.	*Cutios.*	Third Quarter.	*Cantlos.*
	Giamonios.		Samonios.
	Simivisonnios.		Dumannios.
Second Quarter	*Equos.*	Fourth Quarter.	*Rivros.*
	Elembivios.		Anacantios.
	Edrinios.		Ogronios.

It is hardly necessary to point out that we have here four short names, no more; and that it cannot be an accident that each of the four occupies the leading place in its quarter: the symmetry is evidently intentional.

II.

We now come to the two inscriptions on the lead found with all sorts of débris in an ancient well at Rom. On one side is the inscription which M. Jullian calls *A*: it is the following as given by him in his transcript and as modified by his footnotes, except that here the ligatures are resolved into italics and most of the words separated: see the *Revue Celtique* (for 1898), vol. xix. pp. 170–3.—

1. APE CIALLI CARTI
2. ETIHEIO*NT* CATICATO
3. NA DEMTISSIE CLOTV
4. LILA SE DEMTITIO*NT*
5. BI CARTAO*NT* DIBO
6. NA SOSIO DEEI PIA
7. SOSIO PVRA SOSIO
8. GOVISA SVEIOTIET
9. SOSIO POVRAHE . . O . . T
10. SVA DEMTI APO . . TI
11. D V N N A V O V S E I A

Here the second word CIALLI is evidently the plural of the word CIALLOS, which I have treated as meaning an aggregate or collection as applied to days and months in the Calendar; then comes CARTI, which should seemingly be an adjective in concord with CIALLI, unless one should rather regard the second word as also a noun. Then we should have to translate 'the hosts of Cartos *or* carton,' whatever that might mean; but I am inclined to the former view,

and to render the two words as the 'powerful hosts' In either case one is reminded not only of such names as *Carti[s]*mandua, but also of a word CARTOVAL . . . in an inscription found at Binchester in Durham (C. I. L vol. vii. 425) That is unfortunately fragmentary, but it refers to certain unidentified Mother Goddesses. Turning back to the word APE, which occurs also in *B*, it is clear that it cannot be a preposition, but rather a particle of interjectional nature to call attention, or else one with the function of *que* in such French expressions as *qu'il vienne*, and the like. In the latter case one might treat it as possibly made up of *ad-be* involving a form of the verb 'to be,' such as is perhaps the BI at the beginning of the fifth line. In English one would have to say 'let it be that,' 'may it be that,' or 'would that [1].' CATICATO is presumably a man's name *Caticatos*, in the dative case governed by the verb *etiheiont*, in which it is all but impossible not to recognize almost a literal equivalent of *adsint*, or better *adsient*, which Terence has preserved. The Latin *adsum* takes the dative case, and is a favourite word in entreaties to gods and goddesses for their helping presence, as in Vergil's *Georgics*, i 18 '*adsis, o Tegeaee, favens*'. the dictionaries supply plenty of instances. Brugmann, in his *Grundriss*, ii. 1406, suggests as the Aryan prototype of *sient* the forms *s-i̯-ént* or *s-ii̯-ént*, so our *heiont* must have had its final syllable refashioned after forms where the vowel *o* had a more ancient right to be. But the most remarkable thing here is that we have before us evidence that the language of the Pictones had begun to change *s* between vowels into *h* which both Irish and Welsh have regularly done, and, as a rule, with the frequent result of dropping the *h* [2]. In the next place, the first object of invoking

[1] Second thoughts dispose me to regard APE as etymologically inseparable from the prefix in the personal name *Apevritt-i*, in one of the Ballintaggart Ogams in Kerry, the Umbrian word *ape*, *apı*, or *appei*, 'quum, postquam,' or the Latin *ape*, 'apud, παρά,' cited by Pott in his *Etymologische Forschungen*, i. 508, 509.

[2] They would seem, however, to have been outstripped by Gaulish in the inscription from Néris-les-bains (Allier), which, according to Stokes's *Celtic Declension*, p. 72, I should treat as BRATRONOS | NANTONICN[OS] | EPAĐATEXTO RIGI . LEVCVLLO | SVIOREBE . LOCI | TOV: it probably means—Bratronos son of Nantonos had this erected (?) for Epađatextorix (and) Leucullos (and) his two sisters. Stokes treats the last word as *locitok*, but his account of the final letter suggests to me V or Y, so that one could not help comparing it with ΕΙΩΡΟΥ or IEVRV (p 117 below). M. Mowat reads the verb *locitoi*. Whatever it exactly was, K is in my opinion highly improbable, but the interest of the whole centres at this point in *svıorebe* for *svıhorebe=svısorebe*, meaning, I take it, 'to or for two sisters.' One should compare the Welsh refashioned vocable *chwior-yđ*, 'sisters,' and perhaps hesitate to treat Ammianus's *euhages* (ii 9) as a mere blunder for οὐάτεις or *vates*.

the aid of gods or demons for Caticatos was a negative one, beginning with *na*, 'that not,' which is followed by a verb DEMTISSIE, and the nominative to that verb is, according to M. Jullian's reading, CLOTVVLA, CLOTVVIA or CLOTVLILA. The first of these is hardly probable, while either of the others would do; and led by his representation of the writing I should regard CLOTVLILA as the more likely to be the right reading. in any case the name seems to have been feminine. With *-lila* compare *Lillus*, *Lilla*, and kindred names cited by Holder. The verb may be provisionally rendered by the Welsh *difetha*, 'to ruin, kill, or destroy,' derived from *meth*, 'failure,' Irish *meth*, 'failure, decay': the Welsh word is perhaps a loan from Irish. Lastly, NA DEMTISSIE occurs also in Inscription *B* on the other face of the piece of lead. But to return to line 4 of Inscription *A* the rest of it reads SE DEMTITIONT, where we have evidently another form of the same verb it is in the plural this time. If I now translate the whole from the beginning in the way suggested, it will appear more clearly what is to be made of DEMTITIONT, as follows. 'O that the powerful hosts may be present to Caticatos that Clotulila should not destroy him, that they should destroy her.' I have very little doubt that this is the construction of the passage, and therefore I cannot avoid the conclusion that DEMTITIONT is in the same mood and tense as DEMTISSIE; but how can that be elicited from the spelling? The TITI of the former is suspicious, and one feels at first an inclination to strike out one syllable TI, but that would not help. The key to the difficulty is rather that to the engraver *ti̯* and *ssi̯* were equivalent spellings: whether he arrived at that conclusion from what he knew of the phonetics of his own vernacular or from Late Latin spelling, it would perhaps be impossible to say. In either case it seems quite clear that he should have stuck to the *ss* and written *demtissiont*.

The fifth line I am unable to explain, but it seems in some way to appeal especially to one out of the number of the CIALLI CARTI, and the name appears to have been the female one of DIBONA, as to which, however, M. Jullian says the letters BO are not certain. He also remarks that the three first letters of BI CARTAONT can *à la rigueur* be read DVG. On the whole I adhere to what he considered the better reading, and provisionally render the words 'May it be that they exert their power, O Dibona.' The rest of the prayer pursues the special appeal to Dibona by means of flattering epithets bestowed on her, such as *pura*, which may have been either a native Pictonian word synonymous with Latin *pura*, or else the Latin word itself borrowed. The influence of Latin is highly

probable here, and one cannot help seeing it in the PIA of line 6 where one wants some such a word as *devva*, or a short feminine corresponding to the Sequanian *devvos*, 'a god.' In any case DEEI suggests nothing to me, and in fact the reading is uncertain. M. Jullian says of it: 'DEEI *probable, non certain, j'ai cru voir un instant* DERI, *mais cette lecture n'a pas tenu.*' Had he been able to read DEVI that might do, and even DERI might pass. At any rate Old Irish supplies such names with *der*, 'daughter,' as *Der-Lugdach*, 'Daughter of Lugaid' (Stokes's *Martyrology of Gorman*, p. 352); so one would have been able to translate 'O thou dutiful daughter' for DERI PIA. Line 8 is, according to M. Jullian, the most difficult of all, but let it stand for the present as if containing in GOVISA an equivalent of Latin *gavisa*. In line 9 POVRA is probably a Greek spelling of PVRA but forming possibly the beginning of a compound POVRA-HE . . . the end of which is uncertain. One is tempted to suppose a plural verb here ending in *-ont*, but on the whole I am inclined to think the formulae with SOSIO, 'this,' contain nothing much besides epithets applied to the goddess until we reach line 10 with SVA DEMTI. These vocables I should render 'so do thou destroy,'—the object of the verb is put into a circumlocution which I do not understand, especially as the reading is in part uncertain. I have taken the verb *demti* here to be on a level with *derti* in Inscription *B* on the other side. Possibly the end consists of SEIA, but I should prefer SEIE, which the uncertainty of the reading would perhaps just permit if so, it might be translated 'may it be,' Latin *sit* (for *siet*). Finally, without discussing in detail guesses which are hardly worth it, I append them in a connected form in the hope that somebody may improve on them:—

'May it be that the Powerful Hosts help Caticatos, that Clotulila should not effect ruin, that they should ruin her. let it be that they exert their power to do this, O Dibona!

this, O dutiful daughter!
this, O pure one!
this, O thou who hast rejoiced . . . !
this, O thou of the pure path (?)!

So may it be that thou destroy . . . . (So) be it!

Since writing the foregoing I have noticed that Rom is on a tributary of the Clain called *Dive*, representing the name from which our *Dibona* (with Latin *b* for *v*) was derived, meaning doubtless the divinity of the river. The longer form occurs elsewhere as *Divona*, that is *Dīvŏnā* (perhaps better *Dēvŏnā*), and Ausonius, singing to

that stream dear to his native Bordeaux, notes the celticity of her name.—

> Salve, fons ignote ortu, sacer, alme, perennis,
> Vitree, glauce, profunde, sonore, inlimis, opace.
> Salve, urbis genius, medico potabilis haustu,
> Divona Celtarum lingua, fons addite divis.

The other side, *B*, of the lead was hardly written by the same hand, and among the letters appears a character not found in the previous incantation. M. Jullian has with some hesitation ventured to transcribe it as z, but I think it preferable to use a Greek gamma to represent it; and in my copy of his reading one or two of the alternatives which he has relegated to the footnotes are adopted, as follows, with the ligatures resolved and most of the words separated.—

1. TE VOR*AV*IMO
2. EHΓA AT*ANT*O TE HEI
3. ΓO ATA*NT*A TE COM
4. PRIATO SOSIO DERTI
5. NOI ΓOMMIO ATEHO
6. TISSE ΓOΓEA TE PRI
7. AVIMO ATA*NT*A TE
8. ONTEΓATIM EΓO
9. ΓIA TE VOR*AV*IMO
10. APE SOSIO DERTI
11. IMO NA DEMTISSIE
12. VΓIETIAO . . PA . . A

For VORAIIMO in the first line M. Jullian suggests a ligature of AI making AV, which I adopt. In the second line the beginning and the end are of doubtful reading ANT is a ligature which is hard to distinguish from the ligature for AT. In the third line NT also form a ligature. At the end of line 5 for HO one might possibly read HE In line 6 for ΓOTEA he queries ΓOGEA. In line 9 I read the same ligature AV as in the first line, as suggested by M. Jullian. In line 11 the letters ONA are described as not certain. Line 12 is of very problematic reading, but he makes the queried suggestion of VΓIETIAO . . PA . . A.

By way of preliminaries to an attempt to translate this prayer one may notice that DERTI | IMO suggests that VORAVIMO stands for *vorav' imo*, that VORAVI is a first singular like the Latin *amavi*, that PRIAVI is to be dealt with in the same way, that DERTI is to be construed like DEMTI in Inscription *A*, and so with NA DEMTISSIE, APE and SOSIO, which are all words we have had there. To take the words in their

order, TE is clearly an accusative pronoun, the same word in fact as Latin *te*, VORAVI implies a verb apparently of the same origin as the Irish *feraim*, 'I pour, I celebrate.' This word is not only used in Irish of liquids, of rain and snow, but also of celebrating a festival or holding a fair, and in the phrase *feraim failte*, 'I give one a welcome,' literally 'I pour a welcome.' It looks as if we had here to deal with a verb which was once used in the religious and sacrificial sense of making a libation to a deity. The next vocable *imo* I should connect with Med. Irish *ém* or *éim*, 'in sooth, verily, truly': see also *Gram. Celtica*, p. 703, where it is variously interpreted as 'item, etiam, vero, autem.' *Atanto* and *Atanta* seem to be the names of the husband and wife who make the prayer, and I cannot help thinking that the inscriber made some mistake here, and that the uncertain readings EHIA and HEIO should be practically one and the same word repeated as HEIO or HEIIO, to be treated, in fact, as the equivalent of Latin *ego*, 'I,' but with an initial *h* owing its origin to the hiatus, as frequently happens in Irish and Welsh. Thus the symbol which M. Jullian has transcribed z probably represents *gh* or the spirant reduction of *g*, which in the word TIO in the Coligny Calendar we found slurred out of the pronunciation altogether. COMPRIATO appears to be derived from the rood *prí*, 'to love,' from which come such vocables as our English 'friend,' and it seems to be a participle agreeing with TE, though it does not show the final nasal which one would expect in the accusative case. The whole so far may be rendered provisionally thus: 'Truly thee have I Atantos libationed, thee have I Atanta, thee as one beloved.'

We have had SOSIO already for 'this,' it seems to be here used proleptically for POMMIO, and SOSIO DERTI NOI means 'this give or grant to us twain': compare the Irish verb in *con-dartin*, 'ut darem,' *con-darta cách*, 'that every one may give,' *ar-na-tarta*, 'that (he) may not give': see Ascoli's *Codice Irlandese* (Rome, 1878), ii. p. cxcii. NOI is the dative dual of the first personal pronoun like the Greek νῶιν, 'to us twain.' The real object of the verb begins with POMMIO, with which probably one has to take ATEHOTISSE POTEA. One is at once reminded of the Latin *pomum*, and wonders whether we have here not a word derived from it; but when one bears in mind that this is to all appearance the joint prayer of man and wife, no kind of fruit is as likely to be the blessing asked for as children. The Latin *pomum* serves, at any rate, to lead one to a whole group of words which seem to postulate a root *pu*: such, for instance, are Latin *puer*, 'a boy,' *putus* and *pusus* of the same meaning, *pullus*, 'a young animal, a foal,' Greek πάϊς, παῖς, 'a boy, a child': compare Sanskrit

putra, 'a son,' and with Latin *puer* equate the Welsh *wyr*, 'a grandson,' with the *p* got rid of. But early Goidelic has a form to show with that consonant intact, namely, the genitive *poi*, 'of a son, or boy, or descendant,' for an earlier *poi̯i*, implying a nominative *poe(-s)*[1] in Celtican presumably *poi̯o-s*. But, to return to Latin *pomum*, we may treat the stem *pomo-*, which it implies, as of a somewhat wider signification in Pictonian, where we seem to have from it the derivative stem *pomi̯o-*, which, with the *m* doubled to indicate the blocked vowel, yields us *pommi̯o-*, after the analogy of *Dumanni̯os* and *Simivisonni̯os* in the Calendar. A slightly different tack is suggested by such other words as Latin *pumilus* and *pumilio*, 'a little man, a dwarf,' Sanskrit *pumans*, 'a man.' We are, in any case, left in doubt whether POMMIO should mean 'a boy, a son,' or the plural 'children,' or else a singular like 'offspring.' POTEA is probably to be regarded as a kindred word meaning progeny or family, add to this that ATEHOTISSE is possibly to be treated as *atehotissie*—compare CANTLOS, p 101—with the same termination as DEMTISSIE and the same prefix *ate*, which we have had as *eti* in *etiheiont*, also that HOT represents *sot* to be connected with the Irish *suth*, 'Geburt, Frucht' (Stokes, loc. cit., p. 306). Thus the clause might be rendered 'This do thou give to us two, a son that should beget a family.' The next sentence is pretty clear, TE PRIAV'IMO ATANTA, 'Thee indeed have I Atanta treated as a friend'; and the run of the following one seems to be straightforward, TE ONTEΓATIM EΓOΓIA. For the word ending in IM can hardly be anything else than the first person singular of a verb in the present indicative, followed by the nominative *eghoghia*, the pronoun *egho* with an affix that reminds one of the Greek ἔγωγε. But what the verb exactly means is a more difficult question it may be guessed to have helped to convey in some way the idea of entreaty or worship. But let us take it in detail, beginning with the prefix .—we seem to have a related word in Old Irish *út*, *s-út*, Mod Irish *úd*, *s-úd*, Welsh *h-wnt*, 'yonder, over there'; and we have the same, perhaps, as a prefix in the Old Irish

[1] This vocable, borrowed before Early Goidelic had dropped the *p*, forms the second element *pui* (mutated into *bui*, *bwy*) in Welsh names like *Guorapui* and *Guorabui*, *Gwernabwy*, *Rhonabwy*, compare also *Junabui* Latinized into *Iunapeius*, *Iunapius*, and note that the *p* or *b* is preceded by the thematic vowel *a* of Goidelic, which goes some way to explain why Brigomaglos should become Briafael, or Dinocat become Dinacat. See *The Englyn*, pp 7-9, but compare my paper on *The Ogam-inscribed Stones in the Collection of the Royal Irish Academy* (Dublin, 1902), p. 5, where it will be seen that in Goidelic inscriptions *poi* happens to be oftener preceded by a genitive vowel-ending than by a thematic *a* The same borrowing by the Welsh of Irish names with *p* has taken place in the case of names like *Cunalip-i*; see *The Englyn*, pp. 82, 83, which should be amended accordingly

word *utmall*, 'restless, unsteady,' consisting possibly of *út* with *tamall*, on which see Stokes, loc cit., p. 214 compare the Mod. Irish *útamáil*, the act of wandering, fumbling, or moving about awkwardly see Dinneen's Irish Dictionary. It is of the same origin as Latin *ante*, 'before,' Greek *ἀντί*, and many other words[1] including English *and*, German *und*, which Kluge, s. v, refers to an Aryan form *n̥thá*, the *n̥* of which is represented by the *on* of our ONTEΓATIM.

We come now to the simplex, namely, *ghatim*, which has its guttural softened owing to being preceded by the final vowel of *onte*. So by itself it would be *gatim*, and the question is as to the origin and meaning of such a verb. In answer to this one may first point to such old Celtic names as Gatus, Adgatus, and Ambigatus, to which may be added, from an Ogam inscription in county Waterford, a genitive *Gattagn-i*, which has the value of its *tt* fixed by a related verb cited in the *Grammatica Celtica*, pp. 434ᵃ, 879ᵃ, namely, *trisgataim* glossing the Latin *foro*, 'I bore or pierce'· the *s* in *tri-s-gataim* is probably pronominal and not a part of the verb. In Mod Irish O'Reilly gives *tréaghdaim* as synonymous with *tréaghaim*, 'I pierce through, penetrate,' and Dinneen *treaghdadh* (with *ghd* for *ghad*), 'the act of piercing.' Stokes, loc cit., p. 108, connects *trisgataim* with Med Irish *gat*, 'a withy or osier,' which appears in Mod. Irish as *gad*, genitive *gaid*, 'a withe, a twisted twig or osier' see Dinneen, s v.; and the *t* or *tt* which makes *d* in the later stages of the language is explained by Stokes, by deriving *gat* from a stem *gazdo*, to which he refers Gothic *gazds*, O. H. German *gart*, *cart*, 'Stachel, Treibstecken'; possibly the Latin *hasta*, 'a spear,' should be added. see Brugmann, loc cit., i. § 507. Native words from this stem are unknown in Welsh: on the other hand if Livy's *Ambigatus*, the name of a famous king of the Bituriges, requires to be at all tampered with, it should be made, not into *Ambicatus*, but into *Ambigattus*. In that case, however, one would have to deal similarly by the ABVGATO, which occurs on a gold coin of the Bituriges: see Holder, s. v. Our ONTEΓATIM goes to show that it was not thought necessary, at any rate by the Pictones, to double the *t* in the stem here in question.

After these details as to the phonology of the verb ONTEΓATIM it is time to come to the question of meaning, and this I conjecture to have been 'I prick, I pierce or goad.' How that would apply can best be illustrated by means of a concrete instance · some years ago when I was on a visit at the late Ernest Renan's house at Rosmapamon, near Perros-Guirec on the north coast of Brittany, our genial host

[1] See Pott's *Etymologische Forschungen*, i pp. 259–68.

took his friends one day to see some of the sights of that neighbourhood. Among other things which he showed us was a statue of St. Guirec standing at the head of an open creek. It was of wood, and altogether a very rude work of art, if such it might be called, but what attracted our attention most was the fact that it had innumerable pins stuck into it. We asked M. Renan what the pins meant, and his explanation was exceedingly quaint. He said that when any young woman in the neighbourhood made up her mind that she should marry, she came there and asked the saint to provide her with a husband, and to do so without undue delay. She had every confidence in the willingness and ability of the saint to oblige her, but she was haunted by the fear that he might be otherwise engaged and forget her request. So she would stick pins into him, and thus goad him, as she fancied, to exert himself on her behalf. This is why the saint's statue was full of pins; and it was in some such a way as this, I fancy, that Atanta thought she would compel the divinity she had in view to grant her the offspring desired. It is not necessary, however, to suppose that there stood at hand a wooden image of that god; for why should she and her husband not have provided themselves with a clay image of the divinity? Into that image Atanta could stick pins in the course of her prayer, after a fashion, which, as against human beings represented by their effigies, is not yet forgotten in this country. If this view is even approximately correct, one can account for the addition to *egho* making it into *eghoghia* or *eghoghia*: it would be to give the clause an adversative turn as regards the previous one, in the same sort of way that in Welsh we use pronouns like *minnau*, *tithau*, as contrasted with *mi*, 'me,' and *ti*, 'thou [1].' The two taken together might accordingly be rendered thus: 'Thee have I indeed treated as a friend, thee I nevertheless now pierce with pins.'

The rest of the prayer commences with a repetition of the beginning, and proceeds intelligibly until we come to the last line which is partially impossible to read, and conceals from us the accusative of the verb DEMTISSIE. Of course one does not know whether VIIETIA is the name of a person, say of a demon or witch, or else a noun of some such a signification as sterility or disease. If we piece

[1] Here is an instance at random from the story of Owein and Lunet: see the Red Book *Mabinogion*, p. 168—*O ffoy di racda6. ef ath ordiwed. Os arhoy* ditheu *euo. a thi yn uarcha6c. ef ath edeu yn bedestyr*, 'If thou flee from him, he will overtake thee, if *thou on the other hand* await him he will, where thou wert on horseback, leave thee on foot.' We have the regular equivalent of *ego*, 'I,' as *e* in the Welsh of the Black Book of Carmarthen, where also we have *te*, 'thou, thee,' and *ne*, 'we, us,' mostly as enclitics, later *i*, *ti*, *ni* respectively.

together the foregoing conjectures the whole will run somewhat in the following strain —

Thee indeed have I Atanto honoured with a libation,
Thee have I Atanta,
Thee the beloved one.
This do thou grant us twain, a son to beget a family.
Thee have I Atanta indeed treated as a friend,
Thee nevertheless with pins I now pierce;
Thee have I indeed honoured with a libation,
May it be that thou indeed grant this,
Namely, that VГIETIA should not destroy our hopes (?).

It will have been noticed that there are certain differences between the Rom inscriptions and the Coligny Calendar in point of language, and the question suggests itself, are they such differences of dialect as one would expect in the case of peoples like the Sequani and the Pictones who lived so far from one another, or do the differences show themselves owing to distance of time? The answer should doubtless be that they are due to both. The Calendar is supposed to belong, approximately, to the first century of our era: Dr. Thurneysen thinks that the writing is Roman of the first or second century, loc. cit., p. 524 On the other hand, M Jullian finds that some of the characteristics of the lettering of the Pictonian lead betray a date as late as the fourth century, that is to say, the latter may be perhaps 200 years later than the Calendar, perhaps more. As to the differences themselves, one of them is (1) that the two prayers show in the case endings neither a final *s* nor a final *n*. Thus we have *Atanto*, probably for *Atantos*, *compriato* for *compriaton*, *noi* for *noin*, 'to us two,' *pommio* for *pommion* or for *pommios*, according as it was accusative singular or plural; and *potea* is possibly for *potean*. On the other hand, the Calendar word *tio* for *tigho* had gone further in the path of phonetic decay than the Pictonian pronunciation, which represents as present the spirant *gh* of such forms as EΓOΓIA and ONTEΓATIM. (2) The Rom spelling gives us no instance of ss lisped into Ð, such as we have in the MIÐ of the Calendar, and probably in CAΓIEÐIT (pp. 75, 83 above) On the other hand, one cannot strike a contrast in the matter of *h* for a vowel-flanked *s*, as the Calendar has no *h* or any certain combination where one might expect it, for such a form as Semivisonnios has been conjectured to have *vis* for an earlier *vist-*, or rather *vest-*: see p. 99 above. Similarly with the demonstrative SOSIO on the Rom lead that could not become *sohio* as the word was probably made up of *sod-sio* or *sot-sio*.

A remark or two may here be made on the verbs in the Rom inscriptions. Hitherto, forms like *amavi*, *amavisti*, *amavit* have been regarded as almost peculiar to Latin, but here we have *voravi* and *priavi*; but it is a formation represented also in Gaulish where the verbal form most common in the inscriptions in that language is ΕΙΩΡΟΥ, in Latin letters IEVRV, '*fecit*, made,' where the final *u* was arrived at in a way which reminds one of Italian *cantò*, for Latin *cantavit*, though it is needless to say that we know nothing about the accentuation of IEVRV or of the Pictonian forms VORAVI and PRIAVI. Some of the other verbs, however, betray their accentuation here unmistakably, such as DEMTI and DERTI for *dé-met-i* and *dó-rat-i*, and NA DEMTISSIE and SE DEMTITIONT: they are in a line with the Old Irish verb when it occupies the enclitic as distinguished from the orthotone position. This is proved by the disappearance of the stem-vowel of the verb, and it opens up a remarkable vista into the parallelism between Pictonian and Irish, though it is rather disappointing to find that even Pictonian of the third or fourth century does not carry us beyond the difficulties of the irregular verb witness DERTI here, the participial DORTON in the Calendar, and some of the puzzling forms taken by the same verb in Irish: see p. 112 above, where a form was cited *na tarta*, with *tarta* for the *darta*, which the other forms of the verb suggest. From this and many cases parallel to it, some Celtists have assumed the existence of a preposition *to* by the side of *do* or *du*, 'to,' the former being used when its syllable came under the stress accent. The separate existence of a Celtic preposition *to* has always appeared to me more or less mythical, and the form is to be explained in another way. Irish has *tú*, 'thou,' corresponding to Latin *tu*, but the Irish for *tuus*, 'thine,' being used proclitically is *do*, and not *to*. Similarly, without going into details, the prepositions prefixed to verbs have commonly two forms, a weaker one for an unaccented position, and a stronger one for an accented position. It is the reflex action of this analogy that has led to the preposition *do*, 'to,' being provected into *to* under the stress accent: traces of this reflex action may be expected in any language where the mutation of initial consonants, mostly a weakening of those consonants, is prevalent: plenty occur for instance in Welsh, but the case of *ll* and *rh* will suffice, and in Irish that of *f* for Aryan *w* or *u̯*. To return to our documents, the *t* here in question has no place in the DERTI of Inscription *B*, or the DORTON of the Calendar.

These last words suggest a question as to the vowel sequence, for we have DERTI with *e*, and DORTON with *o*; that is, the *o* of *do* becomes *e* in DERTI under the influence of an *i* in the next syllable. But our

data are too slender to enable us to extract the whole of the law of vowel harmony. Thus we have besides these such forms as ETIHEIONT and ATEHOTISSE, with probably the same prefix as *eti* and *ate*, where the sequences *a-e* and *e-i* are intelligible enough Those of *i-e* and *e-o* are also fairly easy to grasp, while it is doubtful whether POGDE is a contraction of *po-egde* or *po-ogde*. And as for EXO for *oc so*, no explanation offers itself, perhaps, except the false analogy of combinations like EXIN from *oc-sin-*, or else the possible conjecture that *so* was here pronounced *sho*, with the palatal sibilant: compare p. 91 above.

To the foregoing remarks I wish to append a mention of one or two inscriptions which have been treated as Gaulish. Foremost comes the one found *auprès de* Bourges, with the writing scratched on the neck of a vase of black ware, and supposed from its style to date as far back as the fourth century of our era. See the *Revue Archéologique* for 1849-50, pp. 554-6 (with facsimile); also Stokes's *Celtic Declension*, p 75, where the reading is given continuously, and resolved thus BVSCILLA SOSIO LEGASIT IN ALIXIE MAGALV. Dr. Stokes translates it 'Buscilla Sosia placed (this) in Alisia to Magalos' The dative *Magalu* I take to be another spelling of *Magalo* with *o*, as in *Devvo Rivo*: compare *exu* for EXO, p. 124 below. There is a lack here of any crucial point to enable one to decide whether the inscription is in Gaulish or in a dialect belonging to the Pictono-Sequan group. I am inclined to the latter, and to translate the legend thus 'Buscilla placed this in Alisia for Magalos' This was probably Caesar's Alesia in the country of the Manduvii, now called Alise St.-Reine, in the Côte d'Or, rather than Alaise in the neighbourhood of Besançon. SOSIO, which I cannot make into a feminine *Sosia*, appears, as Pictet thought, to be a demonstrative pronoun, in fact the *sosio* with which we have had to deal in both of the Rom inscriptions, see pp. 110-12 above. The weakness of this argument consists in the possibility of Gaulish also having had *sosio* for 'this'. so it cannot be regarded as amounting to anything more than a presumption against the Gaulish origin of the inscription.

A fragmentary inscription in the museum at Évreux, the ancient city of Mediolanum Aulercorum, is on a bronze tablet found at a site called le Vieil-Évreux, a name derived from that of the tribe which was described in full as Aulerci[1] Eburovices, for there

[1] This peculiar name suggests comparison with the Irish word *eala*, 'a swan,' Welsh *alarch*, the same, Latin *olor*; but the relation between the four words, if any, would form a phonological crux with which I should not know how to deal. Otherwise there would be nothing extraordinary in a tribe of people calling themselves Swans.

were besides them Aulerci Diablintes (Jublains), Aulerci Cenomani (Le Mans), and Aulerci Brannovices, who were clients of the Aedui. The inscription as it stands is not intelligible, but it is seen to have ended in Latin, and the lettering is described as a good sample of the writing of the beginning of the first century see the Berlin *Corpus Inscriptionum Latinarum*, vol. xiii. no. 3204, where it is given approximately as follows :—

1. . . . . S . CRISPOS BOVI . . .
2. . . . RAMEDON
3. AXTAC BITI EV .
4. . . . . ƆO CARAÐITONV
5. . . . . N IA SEIANI SEBOÐÐV .
6. REMI FILIA .
7. . . . . DRVTA GISACI CIVIS SV . . . . .

Under the name SEBOÐÐV Holder, in his *Altceltischer Sprachschatz*, suggests in the first line the reading BOVD . . . And in line 5 M. Seymour de Ricci has conjectured . . . LA SELANI : the end is regarded as originally CIVIS SVESSIONIS. Holder suggests that GISACI is the name of a place, *Gisay*, in the Eure, and no. 3197, found at Vieil Évreux, has DEO GISACO. Moreover the feminines DRVTA, and SEBOÐÐV, and the masculine REMI were undoubtedly Celtic names, but the last three lines seem nevertheless to have been meant to be Latin, while the first four were intended to be Celtic. BOVD might be regarded as standing for some such a Celtic name as BOVDOS BOVDICCOS or BOVDILLOS, and I see no reason to treat CRISPOS as borrowed from Latin rather than as a word common to Latin with one of the Celtic languages of Gaul, but not with one of the Gallo-Brythonic group, as the Welsh word for *crispo-s* is *crych*, 'curly,' an early stage of which we have exactly in the name *Crixsus*, *Crixus*, which I take to be Latin spellings of *Cricsos* for an earlier *Cripsos* compare Uxellodunon and the like names with uxell- (Welsh *uchel*, 'high'), for an etymological *upsel-* ; and Welsh *ucher*, 'the evening,' Latin *vesper*, *vespertinus*, which seem to have been borrowed into Irish as *fescor* and *espartain* respectively, just as Welsh *gosper*, 'vespers,' Cornish *gwesper*, and Breton *gousper*, come also from Latin But Welsh *ucher*, can hardly come from a stem *vesquer-*, whatever the origin may have been of Lithuanian *wákara-s*, and Old Slavonic *večerŭ*, 'evening,' as forms with medial *squ* make in Welsh *sp* as in *hysp*, *hesp*, 'dry,' and *hyspys*, 'evident': see Rhys's *Celtic Folklore*, p. 264. If the foregoing conjectures should prove well founded the Celtic portion of the inscription cannot be Gaulish

but belongs rather to one of the dialects of the Pictono-Sequan group.

These notes may be appropriately closed by some account of certain famous Celtic formulae in Marcellus of Bordeaux's *Liber de Medicamentis*, which he wrote about the beginning of the fifth century. In June, 1847, the great German philologist Jacob Grimm contributed to the Berlin *Akademie der Wissenschaften* a paper on Marcellus, and called attention to words in his text which Grimm regarded as Celtic; but his knowledge of Celtic was too slender to carry him very far, while in 1853 Zeuss wrote in his preface to his *Grammatica Celtica*, as follows 'Quae apud Marcellum Burdegalensem, Virgilium grammaticum, in glossa malbergica leguntur peregrina, inaudita vel incognita, si quis quaesiverit in hoc opere, non inveniet; in his omnibus enim equidem nec inveni vocem celticam nec invenio.' To most people at the time this seemed to settle the matter, and also the much weightier matter of the existence of traces in Gaul of any Celtic language other than Gaulish: it was tacitly assumed that there were none. Grimm, however, was only stimulated to go into the matter further. So in April, 1855, he contributed another paper to the Academy on the subject of Marcellus's formulae, and he had now the help of Professor Pictet of Geneva. Pictet's analysis in his own words are incorporated in Grimm's paper; and though most of the details would have now to be re-written in the light of more recent research, the two philologists had little trouble in establishing the celticity of some of the words and sentences in the text of Marcellus, a result which Zeuss himself appears to have recognized: unfortunately, he did not live to publish the results of a later study of Marcellus[1].

It is not my intention here to try to exhaust the Celtic element in the text of Marcellus, but I may begin with a passage containing two charms in chapter viii of the Teubner edition (p. 87) as

[1] See the *Kleinere Schriften* of Jacob Grimm, edited by K. Mullenhoff (Berlin, 1864), vol ii, pp 114-51 ('Ueber Marcellus Burdigalensis'), pp. 152-72 ('Ueber die Marcellischen Formeln'), and more especially pp 154, 156, 167-9; see also Pictet's *Essai sur quelques inscriptions en langue gauloise* (Geneve, 1859), p. 54, where he says of Zeuss—'Plus tard, et mieux instruit par un examen subséquent, il a reconnu la *celticité* de ces formules par une lettre adressée à Grimm, et communiquée à l'Académie de Berlin'. see the *Monatsberichte* of that body, 1856, p. 187, where Zeuss undertook to cancel the erring passage Nevertheless, in the second edition of the *Grammatica Celtica*, Ebel the editor seems to have published it without note or comment.

follows:—'Digitis quinque manus eiusdem, cuius partis oculum sordicula aliqua fuerit ingressa, percuriens et pertractans oculum ter dices—

Tetunc resonco bregan gresso.

Ter deinde spues terque facies. Item ipso oculo clauso, qui carminatus erit, patentem perfricabis et ter carmen hoc dices et totiens spues—

In mon dercomarcos axatison

Scito remedium hoc in huiusmodi casibus esse mirificum.'

In reference to this Grimm (loc. cit., ii. p 128) cites several apposite passages from the Classics, and among them the words of Tibullus, i. 2. 54 —

Ter cane, ter dictis despue carminibus

We have already found *te* (p 112 above) used like Latin *te*, and it is probably the word with which the charm begins. I do not know how to interpret *tunc resonco*, but I take the word ending in *o* to be a verb in the first person singular of the present indicative, meaning 'I do or am doing' something or other, so that the Latin word *tunc* is inadmissible. What the original of *tuncresonco* may have been, or how it ought to be analysed, I cannot say, but I take it that the verb involved governs *bregan* in the accusative case, and that the latter meant 'superior power or virtue,' as being probably derived from the same origin as O. Welsh *breyeint* (for *brigeint*), 'a right or privilege,' and *brenhin* (from *breenhin* = *brigentin*), 'a king'. compare *Brigit*, 'Bridget,' and *Brigindo* (p. 102 above). If so *gresso* can hardly be other than a genitive governed by *bregan*, and a noun to be identified with Irish *greas*, genitive *greasa*, which Dinneen explains as meaning 'the amount of anything done at a time, a heat, a spell.' O'Donovan, however, having regard probably to the medieval use of the word, defines *greas* as 'any artificial work in the execution of which trade or art is required.' Putting these conjectures together, I guess the meaning of the incantation to be—'Against thee I employ the virtue of the action'; or, shall I say, 'the virtue of the charm'? for that might be regarded as including the action of rubbing and spitting, together with the chanting of the requisite words. Other[1] conjectures resulting in a somewhat different interpretation are possible, doubtless, but the probability of *gresso* being a genitive

[1] For instance one might perhaps find a way of construing the whole so as to make a genitive plural of *bregan* Treating it, however, as an accusative, I have to point out that Old Irish would suggest not *bregan* but *bregin* or *brigin*, but -*in* for -*an* I should hardly regard as being here 'Protoceltic,' rather than due to the influence of feminines of the *I*-declension.

is likely to remain unaffected by them; and that is a point of considerable interest, as it would be another remarkable agreement with Irish declension, which shows the *o* intact in *U*-stems. Witness *Oengus*, 'Angus' (Welsh *Ungust*, *Unust*), genitive *Oengusso*, liable, however, to become *Oengussa* under the influence of another declension. But in Ogam inscriptions the *o* always remains, and is not unfrequently followed by the final sibilant, as in *Cunagussos*, genitive of the name Conghus, Welsh *Cingust*, *Cinust*. It is needless to say that the termination was probably *ōs*; and it cannot escape notice that the bits of ancient Goidelic preserved in Ogam should now and then yield a more perfect form than the chance specimen from Gaul which we have in *gresso* dating from one of the early years of the fifth century if not somewhat earlier.

The other charm is wholly obscure to me; but at first sight it looks as if one had in *dercomarcos* a 'red steed,' and it would be of little avail to exclaim that a horse of any colour is out of the question, as a glance at the other charms would soon convince one. For instance, the next to which Grimm calls attention is 'os Gorgonis basio,' and a little later he mentions a she-mule in the following:—

> Nec mula parit,
> Nec lapis lanam fert,
> Nec huic morbo caput crescat,
> Aut si creverit tabescat!

However, I am more inclined as to *dercomarcos* to detach from it *derco* or *dercom*, and to compare that with Irish *derc*, 'an eye or hole.' Then comes the question what one is to make of *in mon*, now as there is no reason to expect this formula to be Gaulish, I should correct it into *in mou*, 'in my,' with the digraph *ou* for *u* as suggested at p. 79, note, above. The Old Irish for *my* was *mu* or *mo*, now *mo*, followed by vocalic mutation thus *in mou derco* would mean 'in my eye.' Possibly one should read *dercom* to be corrected into *dercon*: the meaning would then be 'into my eye,' in reference, as it would have in that case to be, to some good influence to be introduced into the eye to drive the mischief out. Unfortunately, I do not know whether the *m* can be spared from the succeeding portion of the formula, as I have at present no notion what it means or how it should be divided.

The most important, however, of the incantations will be found in Teubner's edition, chapter xv (p. 152), and it runs as follows:—'Omnia, quae haeserint faucibus, hoc carmen expellet.'

Heilen prosaggeri vome si polla nabuhet onodieni iden eliton.

Hoc ter dices et ad singula expues. Item fauces, quibus aliquid inhaeserit, confricans dices:

Xi exucricone xu criglionalsus scrisu mıovelor exugri conexu grilau.'

The first of these I should write out thus Eilen' prosag geri vomesi polia na buliet onodieni iden eliton. The first word *eilen* I take to be the vocative of a noun of the same origin as Old Irish *ællned*, '*inquinatio*,' *hællned*, glossing *illuvies* (*Grammatica Celtica*, 41[b], 485[a], 802[a]), or *élnithid*, glossing *violator* (ib., 793[b]). It might accordingly be rendered dirt, nastiness, mischief, or perhaps intruder. *Prosag* is a compound of the verb which we have in the Ir. *saigim*, '*adeo, accurro*,' *Grammatica Celtica*, 429[a], 995, n. 8 compare *ni saig sís*, 'it does not reach below,' Stokes and Strachan's *Thesaurus*, i. 447. It enters into the Med. Irish *insaigim*, 'I seek out, I attack,' Mod Irish *ionnsaighidh*, 'incursion' (O'Donovan's Supplement to O'Reilly's *Irish-English Dictionary*); and also into *rosagim*, 'I come up to, I reach, I attain,' for instances of the use of which see Windisch's *Irische Texte*, p. 747, and of the forms, Strachan's *Selections from the Old Irish Glosses* (Dublin, 1904), p. 116. In fact it is an imperative of this very compound that we have in *prosag*, with the Aryan *p* of the preposition intact, which has been lost in the Irish forms extant. The difference of meaning is not serious considering the various shades of signification which compound verbs of motion readily assume in most Aryan languages. Judging from the Rom inscriptions the spelling with *s* is not phonetic, the pronunciation being presumably *prohag*· see p. 108 above. *Geri* is probably of the same origin as either Med. Irish *gér*, 'sharp,' or *gerr*, 'short,' with the force in either case of the adverb 'quickly, at once.' Pictet seems to have been right in equating *vome* with Irish *uaim*, 'from me,' but *si* goes with it as a demonstrative to add emphasis to the pronoun, which then made *messe* or *mesi*, Mod. Irish *mise*, 'I here, I myself'; but *vomesi* appears bodily in Med. Irish as *úaimse*: see Windisch, loc. cit., p. 763[b]. *Polla*, or *polia* as I should prefer to treat it, must mean 'all,' 'wholly,' or 'altogether,' and be traced to the same origin as Irish *uile*, 'all,' Welsh *oll*, liable under the stress accent to become *holl* when following proclitics like *yr*, 'the,' Breton and Cornish *oll*, *holl* See the mutually destructive derivations given in Stokes's *Urk. Sprachschatz*, pp. 52, 304, Henry's *Lexique étymologique du Breton moderne* (Rennes, 1900), p. 214, and Macbain's *Etymological Dictionary of the Gaelic Language* (Inverness, 1896), p. 348, and as to the relation between Irish *uile* and Irish *oll*, 'great,' compare *aile* and *aill*, p. 93 above. Thus far the sentence would accordingly mean something like this 'Mischief, come quickly forth from me altogether!'

Then in *na buliet* we have the negative purpose underlying the previous words but what verb is *buliet*? We have only to suppose here the Late Latin trick of writing *b* for *v*, and to present the verb as *vuliet*, when it becomes easy to recognize as a form of that which is familiar in Irish as *fuil*, 'is,' written in Old Irish *fil*, *fail*, *feil*, *fel* for instances see the *Grammatica Celtica*, p. 491, where we have such as *andechor* feil *eter corpu nemdi*, 'differentia quae est inter corpora caelestia,' and *comdfil inindocbáil*, 'ut id sit in gloria.' It was an impersonal verb of obscure origin, whose subject, in case it was a noun, appeared in the accusative (Strachan, loc. cit., p 45). So, here, the subject seems to be expressed by one or both of the words *iden eliton*, which judging by their nasal ending are in that case. *Iden* is possibly a word of the same origin as Med. Irish *idu*, 'a pang, a pain, a stitch,' genitive *idan*. *Eliton* was probably an adjective intended to qualify the noun. *Onodieni* is obscure to me, but I should guess it to be of the nature of an adverb meaning 'at all,' 'for ever,' or 'at any time.' It is possible that one should read *tonodieni*, and compare the ending of the verb in *na bulie* with that in *na demtissie*, but see SVEIOTIET, p. 107 above. In any case the whole sentence would seem to have meant, 'Mischief, quickly come forth from me altogether that there may not be at any time another (?) pang of pain!'

The second incantation is more puzzling · among other things if *Xi* is to stand as a complete word it has to be regarded probably as an interjection, but there is no difficulty in extracting from the charm one relational word, and that is *exu*, which one may undoubtedly treat as a form of the EXO in the Coligny Calendar · see p. 91 above. In this charm it means 'here, here is for you.' While the patient proceeds vigorously with the rubbing (*confricans*) he says. *exu cricon*, 'here is a *cricon* for you,' *exu criglion*, 'here is a *criglion* for you,' and finally *exu gricon*, *exu grilau*, 'here is a *gricon*, here is a *grilau* for you.' I shall not try to decide between *gricon* and *cricon*—*c* and *g* seem to have been frequently confused in the transmission—or attempt to make sense out of *criglion* or even of *gricon* and *grilau*, which look more like genuine words. All this is of minor interest as compared with the importance of *exu*, the sense of which is here placed well-nigh beyond doubt · it brings us back to a dialect of the same language in which the Coligny Calendar was written.

From Marcellus one is naturally led to the question of the Celtic inhabitants of Bordeaux and the country around it. They were the Bituriges Vivisci, a name on which one should consult M. Camille Jullian's paper read to the Bordeaux Académie on Feb. 7, 1901,

the subject being, 'Le gui et les Bituriges Vivisques.' They were an offshoot of the famous people of the Bituriges, whose name survives in the province of Berry in that of its city of Bourges: those in that region were usually distinguished as Bituriges Cubi. It is the Bituriges who had as their king Ambigatus, to whose name attention was called at p. 114 above. Livy (v. 35), to whom we owe the tradition about Ambigatus, makes him contemporary with Tarquinius Priscus at Rome. He represents him as ruling over the whole of *Celticum* —Pliny calls it *Celtica*—and as finding his subjects inconveniently numerous; so Ambigatus arranges to get rid of vast multitudes of them by sending his sister's two sons, Bellovesus and Segovesus, to lead them forth to conquer territories for themselves. The story goes that the lots directed Segovesus towards the Hercynian Forest, while Bellovesus was to make for Italy. The brothers were to have as many warriors as they liked, and they were drawn, we are told, from the following six peoples: Bituriges, Arverni, Aedui, Ambarri, Carnutes, and Aulerci. No other tribes of *Celticum* are mentioned, and we have nowhere a clue to the time when the first swarm of Bituriges took possession of Bordeaux and the country around it. However, the previous inhabitants were probably Iberians, not Celts or Aryans of any description.

III.

Now that some of the data have been briefly dealt with from the point of view of language, we may glance further at the geographical and historical significance to be ascribed to them For the distribution we have only to enumerate the localities of the monuments —

Coligny above Lyons.
Rom in the department of the Deux-Sèvres
Bordeaux to which the names of Ausonius and Marcellus point.
Alise St.-Reine in the Côte d'Or.
Évreux and Vieil-Évreux in the Eure to the left of the Seine

These localities, together with the names of Livy's six peoples of Celticum, suggest a very wide territory for the kindred dialects of which some specimens have been passed in review We are, however, met with a difficulty at the threshold: what is the whole group to be called? It seems right enough to call the language of the Coligny Calendar Sequanian and that of the Rom inscriptions Pictavian, or better, Pictonian; but what should the group be called, especially when Goidelic is included, as it has every right to be? It has long

been my conviction that the linguistic ancestors of the Brythons and the Goidels were distinct before they came to the British Isles, that is to say, that they spoke two different though kindred languages before they left the Continent, and that accordingly we might expect to find in ancient Gaul and contiguous countries traces of a language nearly akin to Goidelic. Accordingly, as far back as 1891 I read to the Philological Society a paper entitled, 'The Celts and the other Aryans of the P and Q groups,' in which I tried, chiefly by means of proper names with Qu, to prove that we have such traces, but it was rather a lopsided kind of inquiry, as I did not realize then that the same Celtic language which showed Qu also retained Aryan P, in fact, I neglected the first half of the elementary advice that bids one look to one's P's *and* Q's. In the matter of a name for the Continental Celts, who spoke a language resembling Goidelic, I should have called them Celts as distinguished from Gauls, had it not been that the wider meaning given in modern parlance to the word Celts made this inconvenient. So I wrote as follows —'One has therefore to fall back on the name given by Pliny to their portion of Gaulish territory, namely, Celtica, and call them from it Celticans, just as we speak of the inhabitants of Africa and America as Africans and Americans. *Celtica* was the country of the people who, according to Caesar, called themselves *Celtae* in their own language.' Even now I have nothing better to suggest than that the peoples in question should comprehensively be called *Celticans* and their language *Celtican*, unless one ventured to go so far as to call them *Kelts* and *Keltish* [1] respectively, which would preserve the balance as against *Gauls* and *Gaulish*. Putting aside the question of names the classification is beyond doubt linguistically correct, but I do not recollect that anybody has shown any disposition to adopt it except Mr. Macbain, who, in the introduction to his *Etymological Dictionary of the Gaelic Language*, treats the Celtic idioms of the Q group as (1) Gâdelic—(*a*) Irish, (*b*) Manx, (*c*) Gaelic; and (with a parenthetic note of interrogation) (2) Dialects in Spain and Gaul.

Everybody is familiar with Caesar's division of Gaul into three parts, but it is worth while to compare Pliny's version, *Nat. Hist.*,

[1] As for myself I have been in the habit of saying *Celt*, not *Kelt*, *Celtic*, not *Keltic*, but I notice that the pronunciation with *k* is gaining ground. Now one of the ways in which language enriches itself is well known to have been by desynonymizing a word which has acquired two pronunciations So here it might be found useful to retain *Celt* and *Celtic* as applied to the whole family, and to apply *Kelt* and *Keltish* to the subdivision characterized by the *k* sounds (*q*, *c*) as distinguished from the *p* of the Gaulish subdivision. But that is a question which I am only too glad to leave to the makers of English.

iv. 105, as follows —'Gallia omnis Comata uno nomine appellata in tria populorum genera dividitur, amnibus maxime distincta; a Scalde ad Sequanam Belgica, ab eo ad Garunnam Celtica eademque Lugdunensis, inde ad Pyrenaei montis excursum Aquitanica, Aremorica antea dicta.' From our point of view Aquitanica may be set aside as probably in the main not Celtic, but it is very interesting as regards the names which Pliny gives it. He says that at one time it had been called Aremorica this, we may infer, was its name in Gaulish, and we know that it meant the country by or near the sea [1], and it substantially agrees with that of the name by which it was known in his time, for Aquitanica was clearly a name for it derived from the language of some of the Celts of Western Gaul, a name in fact to be traced to a Celtican vocable, corresponding in sound and meaning to the Latin *aqua*, 'water.' It is remarkable that the Celtican name had taken the place of the Gaulish one, or let us say that it had driven the latter northwards.

Setting aside Aquitanica we have left us Celtica and Belgica, the former extending from the Garonne to the Seine, and the latter from the Seine to the Scheldt. That is, we have two territories occupied by peoples bearing three names; but of these Belgica is clearly that named after the Belgae, and we may leave it for the moment on one side in order to return to Celtica, which took its name from the Celtae: that, according to Caesar, was the name which the people of that extensive region gave themselves, while he and his Roman countrymen called them Galli. In other words, he makes Celtae and Galli two names for one and the same people. If he knew of a distinction between them, he did not think it worth his while to call attention to it; and when he says of the inhabitants of the three divisions of Gaul outside the Roman Province, *hi omnes lingua, institutis, legibus inter se differunt*, one cannot extract from the words any suggestion that his Celtae and Galli spoke different languages in the Central district between the Seine and the Garonne. Here then one has to invoke the testimony of the monuments, and they make it clear, as has been shown in detail, that such was nevertheless the case; and as we are forced to admit the fact of a cleavage, one cannot help accepting the names Celtae and Galli as marking the lines of that cleavage. How then came Caesar to identify Celtae and Galli? The answer is suggested by the fact of the Galli having given their name to the whole country, which

[1] See Endlicher's *Glossary*, 'De nominibus Gallicis,' in Stokes's *Celtic Declension*, pp. 80, 81, where we have the following 'Aremorici, antemarini, quia are ante'

Caesar accordingly calls Gallia, though he is found to have used it also in a narrower sense, namely, that of Gallia less the region occupied by the Belgae. In other words, as opposed to the Celtae the Galli have to be regarded as conquerors and intruders, but by the time of Caesar the amalgamation of conquerors and conquered would seem to have proceeded so far that the Roman general thought it, as a rule, unnecessary to write of the populations of Celtica otherwise than in terms of the Gaulish element, such things as the language of the people invaded and in part conquered by the Gauls being passed over in silence by the Roman conqueror of the Gaulish conquerors themselves. Doubtless, to him, Gaulish was a nuisance, and naturally he could not feel anxious to know anything about the persistence of other languages in a country where he probably foresaw that everybody should acquire Latin.

As to the conquests by the Gauls in the country called after them Gallia, something may be learnt from Caesar's account of the state of things there when he arrived. The whole country was divided between two great parties (*factiones*) the leaders of the one were the Aedui, and of the other the Arverni and the Sequani, for both are placed in that position by Caesar, i. 31, vi. 12. It was the Arverni and Sequani, hard pressed by their rivals the Aedui, that invited the aid of Ariovistus and his Germans from beyond the Rhine, i. 31, who took up their quarters in the country of the Sequani, i. 31 previously the Aedui appear to have held the leadership for a considerable time, i. 43, and they were on terms of friendship with Rome, which gave Caesar his excuse for taking their part against the Germans. The party of the Arverni and Sequani may be treated as Celtican, and if we could treat the Aedui as Galli it looks as if it might help us to understand the situation. For it is not easy to sever the name of the Sequani from that of the Sequana or the Seine, but between the Sequani, located in the region to the west of the Jura in Caesar's time, and the basin of the Seine, one finds such tribes as the Lingones, Manduvii, and the Aedui. So it would seem reasonable to suppose that these represented conquering Gauls, who had taken possession of what territory the Sequani possessed in the basin of the Seine. Unfortunately for this conjecture there seems to be no evidence that the Aedui were in reality any more Gaulish than their rivals the Sequani and Arverni. So we have to regard the conflicts between them, though of a nature to lead to the most disastrous results, as occurring between peoples of one and the same Celtican branch of the family.

In another direction we have possibly some slight indications of the

cleavage between Galli and Celtae: one of these is afforded by the name *Allobroges*, which meant people of other marches or another district. It is probably of Gaulish origin, but it is not of a nature to have been the name used by the Allobroges themselves. It may have been that by which they were called by their warlike neighbours the Helvetii, especially if they were Celtae, which is probable, as contrasted with the Helvetii who were themselves just as probably Galli, and were only prevented by Caesar from migrating in a body across the country to conquer for themselves the territory of the Santones, who have left their name to Saintonge and the town of Saintes. This was selected partly for the reason, doubtless, that the Santones belonged to the older group of Celts[1], and were accordingly regarded by the Helvetii as a people whose country a Gaulish state like theirs might naturally aspire to conquer. The name Petrucorii, which was Gaulish, meaning 'four armies,' or 'the people of four armies,' and is now represented by the reduced form of *Perigueux*, is said to have been situated on the land of a tribe called Quirinia. The Petrucorii may have come from the same direction as the Helvetii, and have been instrumental in directing the attention of the latter to the country of the Santones as the goal of their ambition. As it happened, the migration of the Helvetii was undertaken too late—the Roman was on the scene, but it gives us a sample of what had probably been going on for ages in Gaul. Such conjectures as these will serve at any rate to show how desirable it is that the names, the localities, and the relations to one another of all the Celtic tribes of the Continent should be scrutinized anew in the light of the latest discoveries in the field of Celtic philology.

Here the question was as to conquests by the Galli at the expense of the Celtae, but the Celtae had once been the conquerors of the country themselves: they were probably the first Aryans to take possession of it, or of most of it, from its prae-Celtic and non-Aryan inhabitants. In due time it became the turn of the invaders, that is to say the Galli, to be themselves invaded and conquered up to a certain limit, namely, by the Belgae, who took possession of the land as far as the banks of the Seine. In time they would probably have advanced further, had the legions of Rome not made it impossible for them: at any rate, according to Caesar (ii. 4), it was their own tradition that their ancestors had driven out before them the Celts who

[1] That is, in case they were not a prae-Celtic non-Aryan people that had been allowed to remain more or less undisturbed: the same sort of question suggests itself with regard to Brittany—when did the peninsula become Celtic? The documents discussed above give us no clue.

occupied the country between the Scheldt and the Seine he, of course, calls those Celts Galli. But as to the latest of these conquerors, the Belgae, we have no evidence that they spoke a different language from the Galli whom they expelled· it may be presumed that there were dialectal differences between them, though not such as to be conspicuous in their proper names, which are almost the only data at our disposal. This comparative absence of linguistic difference would be quite intelligible from Caesar's point of view, or, more exactly speaking, from that of the Belgic ambassadors who told him (ii. 4), *plerosque Belgas esse ortos a Germanis*, provided one may interpret the words as meaning that the Belgae were of Germanic or Teutonic origin, in fact, that they were Germans who had adopted Gaulish that would settle the question of language. But scholars are divided on Caesar's words, for some, like M. d'Arbois de Jubainville, give them merely a geographical meaning. I can only leave the question open, though I cannot help adding a reference to Tacitus's *Germania*, 28, where a certain eagerness to pass as being of Germanic origin is ascribed not only to the Nervii, who were Belgae, but also to the Treveri, who were not usually reckoned among the Belgae. As to the Nervii they are mentioned as ruling over subject peoples such as the Geidumni, who may have been Celtae see the allusion to them at p. 93 above. Caesar (v. 39) gives the names of five tribes under the rule (*imperium*) of the Nervii, as follows in the accusative. Ceutrones, Grudios, Levacos, Pleumoxios, Geidumnos. Here the name of the Pleumoxii, meaning probably warriors that move quickly or rapidly, may also be regarded as probably Celtican see Stokes on the root *plou*, loc. cit, 253. In fact, all five tribes may have been Celtae who had been subjugated by the Galli, and remained on their land when their Gallic lords were in their turn beaten by the Belgic conquerors. What became of the Galli who formed, when the Belgae came, the ruling class in Belgica one can only guess some may have remained under the yoke of the Belgae, and some may have gone further into Gaul, while those near the coast sailed across to Britain. Such, among other Galli, were doubtless the Britanni, of whom there was what appears to have been a remnant in the valley of the Somme in Pliny's time, while the bulk of them had probably crossed centuries before to the nearer of the Πρετανικαὶ Νῆσοι, or Pictish Islands, and taken possession of so much of it that the whole came to be named after them by the Romans *Britannia*. But even here they were not safe from the Belgae, as is proved by the extensive tracts of southern Britain in which Belgic tribes had settled themselves by the time of Caesar· witness the people that called itself Belgae in this country, and the tradition

preserved by Caesar (ii. 4), as to the power exercised in Britain by Diviciacos, king of the Suessiones.

To return to Gaul, the geographical position of the Celtae has to a certain extent been indicated, and that of the Belgae was comparatively well defined; but where were the Galli? To this Diodorus Siculus, who flourished under Augustus, supplies a comprehensive answer when he writes to the following effect (v. 32):—'It is worth our while now to explain what is unknown to many, namely, that they apply the name Celtae (Κελτοί) to those who occupy the interior above Marseilles, those inhabiting the country near the Alps, and also this side of the Pyrenees mountains. But they give the name Galli (Γαλάται) to those beyond this Celtica who occupy regions looking towards the south (read *north*) near the ocean and the Hercynian mountain, and all those beyond these latter as far as Scythia. The Romans, on the other hand, speak of all those tribes under one collective name, for they call them all Galli (Γαλάται).' On this, one has to remark that the inclusion of Galli and Belgae under the one name of Γαλάται favours, to say the least of it, the view that they spoke the same Gaulish language. On the other hand, it fails to help us much as to individual tribes. Take, for instance, the Parisii on the Seine, as to whom it leaves us in doubt: one may, however, infer in a round-about way, that they were Galli, and not Celtae; for the Parisi, in the land of the Humber and its tributary waters, were probably a colony of the Continental Parisii, and one of the towns in the country of the former was, as we learn from Ptolemy, called *Petuaria*, which means 'fourth,' and cannot have been Celtican, as then it would have begun not with *p* but with *c* or *q*. That they were not Belgae appears probable from their not being included in the list of Belgic tribes, for which see Holder's *Altceltischer Sprachschatz*. So they may be regarded as probably Galli, but the line is not always easy to draw between Galli and Belgae: thus the Treveri are not usually reckoned among the Belgae, but Tacitus makes them look rather like Belgae, as mentioned above, and Pomponius Mela (iii. 2, 20) not only makes them Belgae, but the flower of the Belgae. The passage is otherwise remarkable, and runs thus: 'Aquitanorum clarissimi sunt Ausci, Celtarum Haedui, Belgarum Treveri.' Proceeding in a southward direction one comes across the Helvetii already guessed to have been Galli, who tried to migrate west to the country of the Santones, near whom the Petrucorii dwelt. If that was the latter's own pronunciation of their name, they must have also been Galli, come perhaps from the neighbourhood of the Helvetii and the Alps. The group of Gaulish inscriptions found at

Nîmes and other places near the mouth of the Rhone, possibly means that one or more Gaulish settlements had been effected likewise in the very south of Gaul. Speaking more comprehensively, there seems to be no doubt that the tendency had been for the Galli to encroach on the Celtae, rather than the other way about.

Gaulish as the language of both the Galli and the Belgae became the dominant Celtic speech in Gaul, while Celtican as the language of tribes which in Caesar's time lost in relative importance, and allowed the leadership to pass away from them to more strenuous peoples such as the Gaulish-speaking Remi and Treveri, had to take a second place, though, thanks to the learning of the druids, it may have been the more cultured of the two. But on this point our data are too slender to base comparisons on them, and I wish only to remark that from the political relation of the one language to the other flows a consideration deserving of a passing mention, and it is this the presence of monuments in the language occupying the subordinate position may be taken as evidence presumptive of its being the vernacular in the neighbourhood implied, whereas one dare not risk the same assumption in the case of monuments in the dominant speech. Applying this in the case of Gaulish, one may go so far as to say that the occurrence of an inscription in Gaulish does not necessarily prove that Gaulish was the tongue in use in the neighbourhood of the inscription when it was set up For it may be that the tide of fashion ran so strong in favour of Gaulish that it was composed by and for people whose habitual speech was some form of that of the Celtae and not Gaulish at all, that its being in Gaulish was merely a tribute to the prestige of the latter tongue. A similar remark applies to personal names, for the prestige of Gaulish would help Gaulish names to become adopted by Celtae Analogy for all this can be found in abundance, but I will not go beyond the Principality of Wales, where hardly a tombstone of any antiquity has been discovered in the Welsh language. You might have fancied from their monuments that the people of Wales in the Middle Ages and since till comparatively lately were all Englishmen, Romans, Normans, or anything but Welsh. Much the same remark applies in the matter of the names themselves, as a glance at the prevalence in the Principality of such English names as Jones and Williams would suffice to show. Let us apply the rule, which has just been indicated, to the case of the great Arvernian leader Vercingetorix son of Celtillus, who, according to Caesar (vii. 4), possessed himself for a time of the leadership of the whole of Gaul. Here one will perhaps be told that Vercingetorix was a Gaulish rather than a Celtican name be it so, but it is not enough, for the reason

suggested, to neutralize the evidence of the name Celtillus, which as a diminutive of *Celta*, or whatever the native ending of that word may have been, was probably treated as the peculiar property of the race that called itself Celtae. For it is much more likely that a Gaulish name like Vercingetorix had been received into a Celtican family than that so Celtican a name as Celtillos had been accepted by a Gaulish family. *Celtillus* occurs elsewhere in the country of the Rauraci, neighbours of the Sequani, and *Celtilla* at Miramas in the Bouches du Rhone. see C. I. L. xii. 646, xiii. 5260.

Now that it appears that the middle and west of Gaul was in the possession of the Celtae, and that the language they spoke was closely akin to that of the Celtic inhabitants of ancient Ireland, it may be asked if this throws any light on the question how the latter found their way originally to that Island. I hardly think that it does, and it seems to me that one has to suppose, that before Galli and Belgae came west the Celtae must be regarded as having made themselves masters of the coast from the Rhine to the Seine, further, that from that coast some of them crossed to Britain, and that from Britain some of their descendants reached Ireland. When you go far back enough for our purpose you will have to admit that the Bay of Biscay must have been a large obstacle to the peopling of Ireland from Gaul. This, however, could not hold good of later times or of such mariners as the Veneti of Caesar's time, and however the early Goidels found their way to Ireland, there was no reason why—as early at any rate as the development of the trade of the Armoric league—it should not have been known to the Celtae of the west and centre of Gaul that there were kinsmen of theirs, who spoke a language like their own, living not only in portions of Britain but also in Ireland. This brings me back to what I was forced to regard as a weak spot in my former paper to the Academy. In the course of that paper (p. 35), attention was called to the Latin *Britanni* and Greek Βρεττανοί as contrasted with *Brittones*, the form of the name which those of the Gauls who came over to this country gave themselves. As *Britanni* appeared to me to be Goidelic rather than Brythonic or Gaulish, I asked as to the name 'Did it reach the Romans and the Greeks from Goidels settled on the Continent or from Goidels in the British Isles?' I should answer this now to the effect that it did not necessarily reach them from any Goidels at all but from the kinsmen of the Goidels, the Celtae who spoke a language like Goidelic in the Celtican portion of Gaul. The same kind of question was suggested (Proc. I. 9, 11, 34, 35) in connexion with the name *Ivverna* or *Iverna* which appears in the works of Juvenal and Pomponius Mela as

Iuuerna, treated by the poet as *Jūverna*. Here again I see now that the answer must be that, though coming perhaps from Ireland itself, this name likewise reached the Romans and the Greeks through the Celticans of Gaul, some of whom called it also *Iverngon* (p. 84 n. above). This question has a reflex aspect which is still more interesting. my paper began with the Latin inscription on the Druid Stone in the County of Kildare, where the genitive of another form of the name of Erin occurs as IVVERE, and we have some nine or ten early Ogam inscriptions in Ireland and Wales which contain words like *avvi* (Proc I. 9, 35) spelled with *vv* flanked by vowels. What account is to be given of this spelling by the Goidels? A ray of light is thrown on this question by the Coligny Calendar it is faint but unmistakable, for there we have the dative of the word *dēvos*, 'a god,' written with a double *v*, DEVVO, in the month of RIVROS (p 103 above). This does not stand quite alone, for other inscriptions in Gaul show a word written both AVOT [1] and AVVOT, supposed to have meant *fecit* see Holder, *sub voce*. Lastly, at Greifenburg in the Drave Valley, far away from Gaul, we have an inscription with such Romano-Celtic names as *Lutumarus* and *Vogitoutus*, together with the line DEVVAE ATIOVGON · F. MATRI, where the woman's name DEVVA looks like the Celtic word for goddess · see C. I. L. iii. 4724, also Holder, s.v. *Sevvo*, *Seva*, and *Sevonianus*.

To my thinking the use of *vv* in ancient Erin goes far to establish an instance of distinct influence exercised by the language and orthography of the Celts of western Gaul on the spelling and writing of ancient Goidelic in Ireland and Britain. It gives us an unexpected glimpse into the early history of the Goidel, and the importance of it is only second to that of the discovery of the direction in which one has to look for the Goidel's early kinsmen on the Continent

[1] If *fecit* or *curavit* should prove correct, *avot* would seem to have been a Celtican reduction of an older form *avāvit*, which, in Gaulish, might be expected to appear as *avu*, to be compared with IEVRV see p 117 above In certain inscriptions on clay moulds of Gaulish make the Latin word *forma* is found borrowed, and *formam* is abbreviated in the following instance, which is syntactically remarkable. AVOT · FORM SACRILLOS CARATI, 'Sacrillos son of Caratos had (this) mould made': see Holder s.v. *Caratus*.

THE DATE OF THE FIRST SHAPING OF THE CUCHULAINN SAGA

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Read May 25, 1905

The following paper is an attempt to fix on archaeological and historical grounds the period within which the remarkable set of poems which centre round Conchobar Mac Nessa, king of Ulster, and his nephew, Cuchulainn Mac Sualtaim, first took shape. This subject is all the more important as in these poems we have the oldest existing literature of any of the peoples who dwelt to the north of the Alps. With the evidence from language bearing on the problem the present writer is not competent to deal, but it will be found that in all that he has to say from his particular standpoint there is nothing that runs counter to the results obtained from the linguistic side by the most eminent Gaelic scholars.

According to the native Irish annals, Conchobar and Cuchulainn lived about the beginning of the Christian era. Cuchulainn was the greatest of all the Red Branch knights in Ulster who were in the service of Conchobar, and who resorted every year to Conchobar's capital, Emain Macha (now Navan Rath, close to Armagh) to be drilled in martial exercises.

By some, indeed (for example, M. D'Arbois du Jubainville), Cuchulainn is held to be an ancient Celtic god, but, though his exploits are supernatural, there is no more reason for regarding him as a god than there is for so treating Achilles, or Ajax, or Roland and the other paladins of Charlemagne. It has been the practice of certain scholars to speak glibly of heroic personages as worn-out or faded gods, but though we have abundant instances of heroes becoming gods, as, for example, Heracles, Castor, and Pollux, it has never yet been shown that the reverse process has taken place in the mythology of any people. There is certainly no ground in Irish tradition for believing that Cuchulainn was once a god. He was the son of Conchobar's sister Dechtire, but there is some uncertainty as regards his paternity, for he is variously stated to have been the son of Sualtaim, a famous

Ulster warrior, or of Conchobar himself, or else of Lug Mac Ethlind, one of the divine heroes from the *Sid*, or fairy mound. The doubt about his father, as well as his affiliation to his mother's brother Conchobar, are quite in keeping with what we know otherwise of ancient Irish society, for not only was polyandry in vogue, but Strabo expressly states[1] that the Irish had intercourse with their sisters. Moreover, the mere fact that another tradition regarded him as sprung from Lug Mac Ethlind, an ancient hero, does not at all indicate that he was a god, for in primitive societies there is always a tendency to ascribe a divine parentage to men who stand out pre-eminently in prowess beyond their fellows.

The greatest of the poems of the heroic cycle of Ulster is the *Tain Bo Cualnge*, or *The Cattle Raid of Cualnge*. There are three chief MS. sources for the poem (1) Leabhar na h-Uidhri, *The Book of the Dun Cow*, which dates from about A.D. 1100. The version is an old one, though with some late additions in later language. (2) The *Yellow Book of Lecan*, a late fourteenth-century MS. The version in it is substantially the same as that in the preceding, the beginning is missing, but the end is given. It does not contain some of the late additions in *The Book of the Dun Cow*, and the *Yellow Book*, late as it is, often gives an older and a better text than the earlier manuscript. (3) *The Book of Leinster*, written before 1160, gives a longer version, which is later both in style and language than the other two, and is much less interesting than the older recensions

The *Yellow Book of Lecan*, our source for the 'Muster of the Men of Ulster' which forms the closing part of the *Tain Bo Cualnge*, contains linguistic forms as old as the Irish glosses which date from the eighth century, a fact which well coincides with the tradition that the poem was recovered by the bard, Senchan Torpeist, in the latter part of the seventh century. There likewise is a tradition that St. Patrick called up a vision of Cuchulainn in his chariot to persuade King Laegaire of Tara to become a Christian. Moreover, the Ossianic cycle of poems is, by universal tradition, later than the Cuchulainn Saga, and Ossian is said to have been a contemporary of St. Patrick, and to have recited his poems to that saint. Now the Ossianic cycle celebrates the exploits of the Fianna or Fena of Erin, whose domination seems to have lasted from the reign of Con of the Hundred Battles (A.D. 177–212) to that of Carbery of the Liffey (A.D. 279–97), and they were at the zenith of their power in the time of Cormac Mac Art (A.D. 254–77) under their great champion, Finn Mac Cumhal, King Cormac's son-in-law,

[1] 167, 19 (Didot).

ose name is still familiar in every part of Ireland, and who, ording to the Annals, was killed as an old man beside the Boyne A.D. 283. There is, therefore, a consensus of native tradition that ichobar and his great-nephew and their contemporaries, whose ds are enshrined in the *Tain Bo Cualnge*, must have flourished siderably earlier than Finn and his comrades, and, therefore, not y far from the time of Christ. There is a prima facie case in our of the truth of these statements, because the whole spirit of poems is strongly pagan in spite of the natural tendency of esiastical transcribers to modify them by the introduction Christian sentiments and allusions. The oldest forms of the poems st date, therefore, from a period at least anterior to the introduc-n of Christianity. Is it possible to get any evidence which may ble us to fix more definitely the period in which they first took pe? Investigation will soon show that the warriors described in older epic differ essentially in method of fighting from those who ire in the Ossianic cycle, while they agree not only in that respect in physique, in armature, and in dress with the Gauls of France, northern Italy and the Danube valley, and with the Belgic tribes om Caesar found in possession of all south-eastern Britain, into ich they had passed from the Continent at no very remote date. other words, the object of this paper is to prove that the culture resented in the Cuchulainn Saga is that known to English haeologists as 'late Celtic' (the term first applied to it by the late A. W. Franks), and as La Tène by Continental writers. The ter term has been used because it was at La Tène, the Helvetian tlement on Lake Neuchatel, that this culture first came into ice, and it is preferable to 'late Celtic' because it does not beg question of race or nationality. This culture beyond all doubt onged to that people known as *Keltoi* by the Greeks and *Galli* by Romans, and it extended on the Continent from B. C. 400 till the istian era, and naturally for some time longer in Britain, which y fell under Roman domination a century later than the conquest Gaul.

The La Tène period has now been generally subdivided into three. Tène I (B.C. 400–250), La Tène II (B.C. 250–150), and La Tène III C. 150–A.D. 1). This culture is characterized by a style of ornament ived from Greek sources through the lands at the head of the riatic, by swords, shields, helmets, and brooches of peculiar types, the use of bronze horns, and by the cremation of the dead, ecially in its later period, whilst in ancient literature the Gauls are ularly described as wearing *bracae*, or breeches.

If, then, it can be shown that (1) there are abundant remains of the La Tène period found in Ireland, (2) that the culture represented in the Cuchulainn epic is identical with the La Tène, and (3) that the great chiefs described in that epic have the physical characteristics of the Keltoi or Gauls, we will be justified in concluding that the poems were first composed when that culture was still living. But as it had died out in Gaul by A.D. 1, and almost certainly in Britain by A.D. 100, it is very improbable that it lingered much later than A.D. 150 in Ireland, more especially in face of the tradition already cited that the Fianna, who are admittedly posterior to the Cuchulainn period, were already dominant by A.D. 177.

Physical Characteristics. Much confusion has arisen from the inaccurate use of the terms 'Celt' and 'Celtic[1].' Thus it has been the practice to speak of the dark-complexioned people of France, Great Britain, and Ireland as 'black Celts,' although the ancients never applied the term 'Celt' to any dark-complexioned people, for great stature, a xanthrochrous complexion, and blue or grey eyes were to them the special characteristics of the Celt or German. That a certain number of true Celts, by which I mean a large, fair-haired, and blue-eyed people, were in Britain is certain, for the Belgic tribes of the south and east of England (to whom are ascribed the relics of La Tène culture found in this island) were undoubtedly xanthrochrous, as is clear from the description of Boudicca (Boadicea) which has reached us, and also from Caesar's statement that the people of that part of Britain were the same as the Belgic tribes on the other side of the channel.

Some years ago I called attention to the native Irish tradition of the coming into Ireland in the second century B.C. of a tall, fair-haired, conquering race, the Tuatha de Danann, and I pointed[2] out that it was probably this race who had introduced the brooches of the La Tène type found in that country (see *infra*). Thus, in the very ancient Irish story of Edain, daughter of Etar, an Ulster chief (whose traditional date is about B.C. 100), we are told that as 'Edain and her maids were bathing in the bay a horseman came pricking over the plain. He was Midir, the great Tuatha de Danann, chief of Bri Leith in Co. Longford. He wore a long flowing green cloak gathered around him, and a shirt under that, interwoven with threads of red and gold. A brooch (*eo*) of gold was in his cloak (across), which reached his shoulders at either side. He had a shield of silver with a rim of gold at his back, with trappings

[1] Ridgeway, *Early Age of Greece*, vol. i, pp. 370–1.
[2] Ibid., pp. 582–3.

of silver and a boss of gold; and he had in his hand a sharp-pointed spear covered with rings of gold from its socket to its heel. He wore fair yellow hair coming over his forehead, and his forehead was bound with a fillet of gold to keep his hair from disorder[1].'

Now Conchobar, the king of Ulster, who with his nephew Cuchulainn, forms the centre of the earliest Irish epic, was descended from the Tuatha de Danann, and he is described in the *Tain Bo Cualnge*[2] as 'a warrior fair and tall and long and high, beautiful, the fairest of the kings his form, in the front of the company, hair white-yellow has he, and it curly, neat, bushy, ridged, reaching to the hollow of his shoulders. Tunic curly, purple, folded round him; a brooch excellent, of red gold, in his cloak on his breast; eyes very grey, very fair, in his head; a face purple, has he, and it narrow below and broad above; a beard forked, very curly, gold-yellow he has; a white shirt, hooded, with red ornamentation, round about him; a sword gold-hilted on his shoulders; a white shield with rivets of gold; a broad grey spear-head on a slender shaft in his hand.'

Again we find that in the 'Muster of the Men of Ulster' the men of Muirtheimne, the hereditary patrimony of Cuchulainn, are described as men with 'long, fair, yellow hair.' From these passages we are fully justified in the inference that the Tuatha de Danann had a great stature, yellow hair, and light-coloured eyes. In other words, the characteristics invariably ascribed to the Keltoi by the ancients.

Method of Fighting. In the Cuchulainn cycle all the warriors fight from chariots, and there is never any mention of men mounted on horseback. Cuchulainn's chariot is described as drawn by two horses, 'swift, vehement, furious, small-headed,' one of which was grey, the other black. In the *Wooing of Emer*, we are told that Cuchulainn went to Alba, i. e. Scotland, to perfect himself in feats of arms, and that he learned there the use of the scythed chariot, and in such a chariot he set out to see Emer after his return from Alba. Though by Caesar's time the Gauls had discarded the use of the chariot in war, and men mounted on excellent horses[3] formed the chief weapon of the Gauls in their death-struggle against the Romans, it is clear from both literary and monumental evidence that at no long time previously had the chariot been in universal use among all the Celts of Gaul and North Italy. Diodorus[4] makes it plain that down

[1] O'Curry, *Manners and Customs of the Ancient Irish*, vol. iii, p. 163.
[2] Faraday's transl., p 119
[3] Ridgeway, *Origin and Influence of the Thoroughbred Horse*, p. 99.
[4] v. 29.

to a late date they, like the Homeric Achaeans, had regularly gone to war in two-horse chariots, containing each a warrior and a charioteer: the former first hurled spears called *saunia* at the foe, and then dismounted to finish the combat at close quarters with the sword, the latter doubtless being of the La Tène type (Fig. 3). Propertius, too, in a passage cited in full on a later page, represents a Belgic chief, Virdumarus, as fighting from a chariot. The opening of many tumuli in Champagne has brought to light the remains of Gaulish chieftains, who were interred seated on their chariots, the horses and trappings being buried along with them [1]. The iron tires of the wheels have regularly survived. These interments, as is proved by the swords and fibulae of the La Tène type, cannot be earlier than B. C. 400, and are probably to be set a century later. At the battle of Sentinum in Etruria (B. C. 292) in the Third Samnite War when the Romans overthrew the combined Samnites and Gauls, the latter had a thousand chariots (*esseda*) and cars (*carri*), the charge of which completely routed the Roman cavalry [2].

Though by B. C. 60 the Gauls had ceased to use the chariot in battle, yet Caesar found the Belgic tribes of south-eastern Britain using the war-chariot as well as cavalry, whilst the Maeatae and Caledonians, two chief tribes of northern Britain, continued to use chariots and apparently no mounted men for a considerable period longer [3]. The iron tires of the wheels and other remains of chariots have been found at Driffield, Arras, and Hessleskew, in Yorkshire, the district occupied by the Belgic Parisii according to Ptolemy [4].

Cuchulainn is said to have gone to Alba (Scotland) to perfect himself in feats of arms, and learned there the use of the scythed chariot But as the Caledonians continued to use chariots when these had ceased to be employed for war in southern Britain, Irish chiefs may well have learned improved methods of chariot-fighting from the Caledonians.

Like the wheels of the chariots found in Champagne and in Yorkshire barrows Cuchulainn's chariot-wheels are represented as shod with iron tires. Though no iron tires of wheels found in Ireland have been identified as belonging to the La Tène period, many undoubted relics of chariots, such as pairs of bronze bits, sometimes beautifully adorned with 'late Celtic' ornament (Fig. 1), and frequently associated with a pair of objects which I have identified [5] as rein-guiders

[1] Ridgeway, op. cit, pp. 99-100, Morel, *Champagne Souterraine*, p. 23, Pl. I. x., &c.

[2] Livy, x 28-30.

[3] Dio Cassius, lxxvi. 12 (*ex Xiph. epit.*).

[4] Ridgeway, op cit., pp 95-6

[5] Ibid, pp. 493-5.

similarly adorned, prove beyond doubt that chariots were in use in Ireland in the La Tène period

Dr. P. W. Joyce[1] has pointed out that chariots were used in war in Ireland long after the period in which both Cuchulainn and Finn are
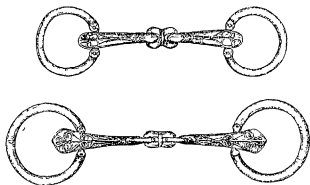
Fig. 1 Bronze Bits Ireland[2]

supposed to have flourished. For example, at the battle of Crinna near Slane in Meath (A. D. 254), Teige, the leader of the Munster forces, used a chariot, and was borne away in it from the field by his charioteer when severely wounded. Again, Dermot, king of Ireland,

Fig 2 Base of Irish Cross at Clonmacnoise, King's Co., showing a chariot.

when preparing for the battle of Culdremne (A. D. 561), gathered an immense army of horse, foot, and chariots, whilst chariots are said to have played a prominent part in the great battle of Moyrath (A. D. 637), Adamnan, in his *Life of St. Columba* (p. 33), speaking of the battle of Ondemone or Moin-mor (A. D. 563), mentions that the Dalara-

[1] *A Social History of Ancient Ireland*, vol. ii, pp 401 sqq

[2] Both specimens are in the Irish Academy Museum. The larger is one of a pair found on the hard turf bottom of a bog at Atymon, Co. Mayo, in 1891 Cf Ridgeway, *Origin and Influence of the Thoroughbred Horse*, p 98, Fig. 45.

dian king, Eachaid Laib, escaped sitting in his chariot (*curru insidens*). Other passages cited by Dr. Joyce which show that Patrick, Brigit, Columba, and other saints and ecclesiastics regularly journeyed in chariots on their missionary expeditions, have no bearing on the question of the use of chariots in war, for there can be no doubt that they continued to be used for travelling purposes in Ireland (Fig. 2) as in every other country (where they were originally used for war) long after they had ceased to form a military arm. Thus we read of chariots being used in England in A. D. 1154[1], yet no one would think of arguing from such an allusion that the Normans of that century used war-chariots.

There is a vital difference between the method of warfare in the Cuchulainn epic and that portrayed in the Ossianic and later stories, for whilst fighting on horseback is entirely unknown to the older Saga, Finn and his comrades regularly fight in this fashion. Although in later centuries kings and chiefs went to battle in chariots, and contingents of chariots were employed at the battles of Culdremne and Moyrath, these stories in no wise prove that the military system was the same as in the Cuchulainn period. It might just as well be argued that because the Persians of the fifth century B. C., the Romans in the third century B. C., and the Seleucid kings of Syria at a still later date occasionally used war-chariots, the military system of those centuries was the same as that described in Homer, where no fighting ever takes place from horseback, but the chariot is universal. In all countries long after horsemen have become the important element in warfare, chariots continued to be used for some time longer as a military arm, especially when fitted with scythes or spears as was done by the Persians, Romans, and Syrians in the cases above cited[2]. The Cuchulainn epic, therefore, belongs to an age before the transition from chariots to cavalry had commenced. But as the Gauls had entirely discarded the chariot for war (though retaining it for travelling) by B. C. 60, and as at the same date the Belgae had taken the first step towards the same end by employing cavalry as well as war-chariots, and as the Fianna, who seem to have

FIG 3 Sword of La Tène type in sheath Connantre, Marne.

[1] Ridgeway, op. cit., p. 355.

[2] Ibid., pp. 307, 496–7

used no chariots, began their domination by the second half of the second century A. D., it is most unlikely that the use of war-chariots without any cavalry continued in Ireland later than A. D. 100. But as a poet writing at a later date would almost certainly have
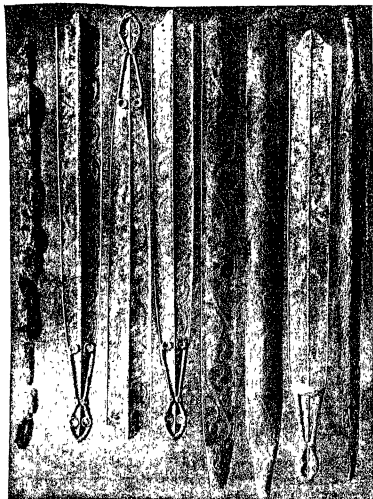
FIG 4. Iron swords and bronze scabbards, Lisnacroghera, Co. Antrim

introduced the form of fighting of his own period (as is done in a preface to *The Tain*), there is a very high probability that the poem was first shaped before A. D. 100.

Swords. The Gauls of the La Tène period used iron swords

(Figs. 3, 11), which differed specifically from those of the preceding Hallstatt or Early Iron Age. These were the swords used by the Gauls in their battles against the Romans, and which are described by Polybius as being specially meant for a heavy, down-cutting stroke.

At Lisnacroghera near Broughshane, Co. Antrim, a number of military weapons were found in a peat bog about 1883–4. Beyond doubt these relics belong to the La Tène culture Of the four swords (Fig. 4) recovered up to 1890 only one is in good condition. Its total length is 19½ inches including the handle The blade has a sharply defined ridge and tapers to a point. The other swords are all fragmentary, one being still in its sheath [1].

In the Grainger Museum in Belfast there are several sheaths [2] (Fig. 4), only one of which, however, is complete, the rest being more or less fragmentary. They are all made of thin bronze, rivetted together at the margins, and over this there is a bead, which, towards the lower third, develops into an elegant ornamentation very similar to that on the sword-sheaths found at La Tène. The perfect sheath is devoid of ornamentation save that formed by the marginal bead; but the others (of which only one side of each remains) are highly decorated with designs formed by incised lines. These designs are of the characteristic La Tène style. It is supposed that the incised lines, which are sharply defined and deeply cut, contained enamel, but no traces of it now survive. There are also circular cavities in the surrounding bead at the tips probably intended for the reception of enamel. On two of the sheaths there is a transverse, raised band, meant to strengthen the sheath. Such bands are present on the sheaths from La Tène, in some cases being repeated at intervals on the sheath. The longest of these sheaths is 22 inches.

FIG. 5. Bronze Scabbard, Lisnacroghera

But by far the finest is the scabbard (Fig. 5) formerly belonging to Canon Greenwell, but now in the British Museum [3].

[1] Munro, *Lake-dwellings of Europe*, pp. 382–4 [2] Ibid., pp. 380–2.
[3] I am indebted to the Trustees of the British Museum for permission to use

There can be no doubt that the heroes of Ulster used swords adapted for delivering heavy down-strokes like those of the Gauls on the continent in the La Tène period. Thus Fergus, in his

FIG 6 Iron and Bronze Helmet; Saintfield, Co. Down

onslaught on Conchobar, 'aimed on him a blow of vengeance with his two hands on Conchobar, so that the point of the sword touched the ground behind him[1].' Cuchulainn had 'an ivory-hilted bright-faced weapon[2].'

the illustration of this scabbard in the *Guide to the Antiquities of the Early Iron Age*, p. 148

[1] *Tain Bo Cualnge* (Faraday), p. 136.

[2] Ibid., p. 89.

Helmets. There can be no doubt that the Celts of the Early Iron Age used helmets of metal. Two helmets of bronze were found at Hallstatt, one at Glasinatz in Bosnia, whilst others belonging to the La Tène period have been found at Watsch in Carniola. The literary evidence puts it beyond dispute that they were employed by the Gauls of France in the La Tène period, for Diodorus Siculus[1] says that 'they wear helmets of bronze with large projections which give the appearance of huge stature to the wearers. Some of these helmets have horns attached to them, whilst others have wrought on them the foreparts of birds or quadrupeds.' But the Gauls had helmets of iron as well as of bronze, since two made of the former metal have been found in France

Dr. Joyce quotes[2] with approval Dr O'Donovan's remark, that 'nothing has yet been discovered to prove what kind of helmet the ancient Irish *cathbharr* was, whether it were a cap of strong leather, checkered with bars of iron, or a helmet wholly of iron or brass, such as was used in later ages. One fact is established; that no ancient Irish helmet made of the latter materials has been as yet discovered.'

Down to the present time no undoubtedly ancient Irish helmet is known, the only possible claimant for such an honour being a remarkable helmet (Figs 6, 7[3]) in the Belfast Museum. It was found (along with the basket hilt of a claymore) on a little island (a crannog?) in Killinev Lake near Saintfield, Co. Down, in 1835. The helmet, which has a somewhat classical aspect, is of iron worn thin by rust, but the guards round the eye-openings (Fig. 6) and the little nose-guard are all of bronze riveted on, as I am informed by Mr. R. Welsh and Mr W. Swanston, F.G.S., who have most kindly re-examined the helmet for me. They are also agreed that the remains of rivets show that there was a bronze border or beading round the bottom to strengthen the iron. The eye-guards are each adorned with three small bosses with a deep cavity in each. These cavities probably once contained either enamel, or crystal, or possibly coral. As this form of decoration is a special characteristic of the La Tène culture, one is tempted at first to regard this helmet as a true relic of that period in Ireland, more especially, as we shall

[1] v. 30 2 *κράνη δὲ χαλκᾶ περιτίθενται μεγάλας ἐξοχὰς ἐξ ἑαυτῶν ἔχοντα καὶ παμμεγέθη φαντασίαν ἐπιφέροντα τοῖς χρωμένοις· τοῖς μὲν γὰρ πρόσκειται συμφυῆ κέρατα, τοῖς δὲ ὀρνέων ἢ τετραπόδων ζῴων ἐκτετυπωμέναι προτομαί.*

[2] Op. cit., vol. 1, p. 124.

[3] The illustrations of the helmets are (by permission) from photographs by Mr. R. Welsh, well known for his fine photographs of Irish antiquities.

shortly see that helmets so adorned are mentioned in one of the prefaces to *The Tain*, whilst there is actually a Gaulish helmet discovered in France adorned with red enamel, and, as we have just seen, it is almost certain that the cavities in the beads on the

FIG. 7. Iron and Bronze Helmet; Saintfield; Co. Down.

Lisnacroghera scabbards were similarly filled. Yet all our leading authorities on ancient armour are agreed in holding that the Saintfield helmet belongs to the thirteenth or fourteenth centuries, although, strangely enough, no helmet exactly parallel to it is known either in any museum or in any representations on works of art

In the version of *The Tain* in *The Book of the Dun Cow* (' Leabhar
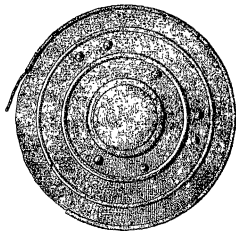
FIG 8. Bronze Shield, Bingen
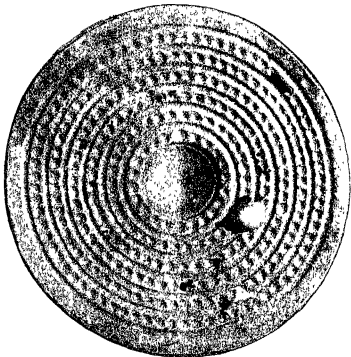
FIG 9. Bronze Shield, Co. Limerick (front)

na h-Uidhri') both Cuchulainn and his charioteer are represented as wearing helmets[1]. The chieftain himself 'put on his head a ridged helmet of battle and conquest and strife, from which there was uttered the shout of a hundred warriors, with a long cry from every corner and every angle of it. For there used to cry from it equally goblins and sprites and ghosts of the glen, and demons of the air, before and above and around, wherever he used to go before shedding
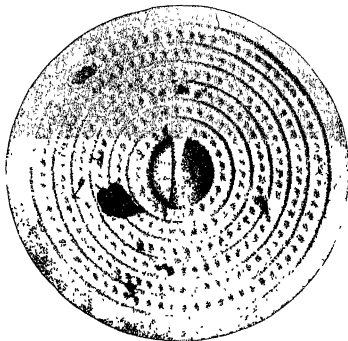
FIG. 10. Bronze Shield, Co. Limerick (back).

the blood of warriors and enemies[2].' His charioteer wore a similar helmet, only that it was devoid of all supernatural accessories, and accordingly gives a true picture of the ordinary warrior's helmet: 'It was ridged like a board (?), four-cornered, with much of every colour and every form over the middle of his shoulders. This was well-measured (?) to him, and it was not an over-weight[3].'

It will be noticed that both helmets have ridges, a feature to be

[1] M d'Arbois de Jubainville says that the helmet is not mentioned at all in the most ancient Irish texts, and that wherever it is mentioned it indicates a relatively recent composition. But this is simply making an assumption and then using the assumption as a test of the age of a text

[2] *Tain Bo Cualnge*, p. 89 (Faraday). [3] Ibid, p 87

seen in La Tène helmets[1] The charioteer's helmet seems to have been furnished with a long crest hanging down the back of his neck. This feature can be at once paralleled from representations of warriors on a bronze girdle-plate found at Watsch[2]. Although the description of the helmets of Cuchulainn and his charioteer occur in a passage of the poem which is regarded as late because of its language, and of an allusion to Simon Magus, it does not at all follow that the main details of the armature are not taken from a far older document, the language of which was afterwards modernized, and into which the reference to Simon Magus was interpolated.

In one of the prefaces to *The Tain* there is a description of the armature and dress of the retinue of Bodhbh Dearg, the great Tuatha de Danann chief of the hill of Sliabh na-m-Ban in Co. Tipperary, when he went to visit his cousin Oichne, the great chief of the ancient hill of Cruachan in Co. Roscommon, afterwards the royal residence of the kings of Connaught[3]. 'Splendid was the caval-

FIG. 11. La Tène Sword in its Scabbard, Hallstatt

cade that attended Bodhbh on the occasion. . . . Their helmets were adorned with crystals and white bronze; each of them had a collar (*niamkland*) of radiant gold around his neck with a gem worth a newly-calved cow set in it. Each wore a twisted ring of gold around him worth thirty ounces of gold,' &c. The use of bronze and crystals to adorn the helmets, ascribed by the writer of the preface (which is of course later than *The Tain* itself) to the Tuatha de Danann, at once reminds us of the Saintfield helmet.

Shields. There can be no doubt that the Gauls of Caesar's day used oblong shields (*scuta oblonga*), a form which some of them had adopted instead of the older round shield at least as early as the fourth century[4], though others of them may have retained for a considerable time longer their old round shields of the Bronze Age type (Figs. 8, 9). There can be no doubt that the Gauls of Noricum used the oblong shield in the La Tène period, for this is proved by an iron sword found along with an iron helmet of the La Tène type and other

[1] Much, *Kunsthistor. Atlas*, p. 119, Taf. li. [2] Ibid., p. 129, Taf. lv.
[3] O'Curry, *Manners and Customs*, &c., vol. iii, pp 156-7.
[4] Ridgeway, *Early Age of Greece*, vol. i, pp. 477-8.

objects in a late grave at Hallstatt. The sword is in its sheath, which is adorned with figures of horsemen, whilst three footmen carry oblong shields and spears (Fig. 11).

To the La Tène period in Britain belong the two well-known *scuta* now in the British Museum[1]. One found in the River Witham is oval and has a highly decorated oval boss, in the centre of which are three pointed oval pieces of red coral, and there are two smaller studs
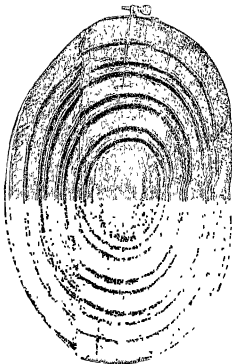
Fig. 12. Alder-wood Shield, Ireland.

of the same substance. The shield once bore the figure of a boar. The other, found in the Thames, is slightly curved inwards on its longer sides. It has a central boss decorated with wavy patterns in relief, of great technical excellence and beauty of design, enriched with red enamel.

To the same period I have referred[2] an oval Irish shield (Fig. 12) in the museum of the Royal Irish Academy. It is made of alder-

[1] Kemble and Franks, *Horae Ferales*, p 190, Plates XIV, XV, *British Museum Guide to the Early Iron Age*, p. 93

[2] Ridgeway, op cit., p. 478, Fig 100

wood. It was found in 1863 ten feet deep in a bog at Kiltubride, Co. Leitrim.

We have just seen that the Belgic *scuta* found in Britain have bosses, whilst Diodorus[1] makes it clear that such too was the case with those of the Gauls. 'They use oblong shields (θυρεοί), as long as a man, adorned with a distinctive emblem. Some of them have
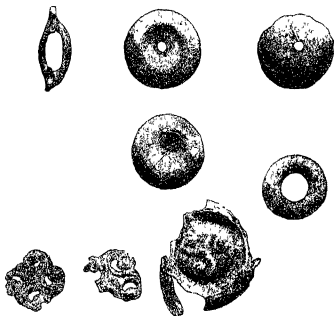
FIG. 13. Shield Ornaments; Lisnacroghera

projections consisting of animals in bronze, well wrought, not merely for ornament, but also to insure safety.'

Doubtless the boar which once adorned the Witham shield is one of the animal forms to which Diodorus refers. I here show (FIG. 13) several objects found at Lisnacroghera, which have with much probability been regarded as the boss and other ornaments of a shield or shields.

There is no doubt that both round and oblong shields were used in Ireland, as is held both by O'Curry and Joyce. Though *lumman* was the generic name for a shield, the term *sciath* was also in use. Now, as this still means an oblong wicker basket, O'Curry argued that it was

[1] v. 30. 2.

an oval shield. Though the word cannot be phonetically equated with *scutum*, there can be little doubt that the *sciath*, like the *scutum*, was an oblong buckler. Cuchulainn's shield is described as 'round (*crum*), dark red, in which a boar that would be shown at a feast would go into the boss' (?). Miss Faraday rightly feels a doubt about this rendering, and in the light of what we have just seen of the boar as a device on a Belgic shield, not to speak of its frequent appearance as a crest on the helmets of Gaulish chiefs portrayed on Gaulish coins, I would venture to suggest that the meaning of this obscure phrase may be that on Cuchulainn's shield there was a boss which carried a boar as large as one that would be served at a feast. The poetical exaggeration is quite on a level with the rest of the description of his array

In *The Tain* there may be two kinds of shields, for in the 'Muster of the Men of Ulster,' given in the *Yellow Book of Lecan*, some warriors are represented as having round (*crum*) shields with bosses, whilst one carries a 'bent shield' (*cuar*) with a boss. It is not unlikely that one of these is an oblong or oval shield, or one with incurved sides like the Thames buckler. Both *crum* and *cuar* are terms of vague meaning. *Crum* means *bent*, and might mean simply *oval*, whilst *cuar* does not appear to mean 'circular,' but simply 'curving,' as it is applied to a sickle. It would therefore be a suitable epithet for an oval shield or one with incurved sides. The shields are of various colours—red, white, black, grey, and ornamented with gold and silver. Dr. Joyce has pointed out that none but round shields are ever represented on the crosses or in the illuminated manuscripts. Moreover, it seems certain that the common shield in use in mediaeval Ireland was a round target. For example, the well-known shield in the possession of The O'Donovan[1] (Fig. 14) is of this shape. If, then, there are both round shields and those of a different type, probably oblong, in the 'Muster of the Men of Ulster,' this indicates a tradition that in the early days the round shield was not the only form in use. But as the round shield was the type used in Ireland in the Bronze Age (Fig. 9), and as that type seems to have become again universal in the eighth, ninth, and tenth centuries, and as we have an actual specimen of an oval shield of the La Tène period found in Ireland, we must infer that the oblong shield had made its way into Ireland between the end of the Bronze Age and the early mediaeval period, by which time it had again gone out of fashion. But as we have not only an actual oval shield found in

[1] This shield is fully described in Ridgeway's *Early Age of Greece*, p. 464, Fig. 93.

Ireland, but also mention in *The Tain* of a type of shield which is certainly not circular, and most probably oval, we are justified in thinking that the poem must date from the La Tène period, or at least from an age not much later.

Dress. There can be no doubt that from the Early Iron Age, and we know not how much longer, the Celts had habitually worn two upper garments. This is clearly shown by the arrangement of the brooches found in the graves at Hallstatt. The first of these was the **Tunic,** an under garment or shirt, made either of leather or of some textile fabric. The other was the **Mantle,** known to the Romans as the *sagum* or *pallium Gallicum fibulatorium*, a cloak either of leather or of some textile fabric. This upper garment was fastened
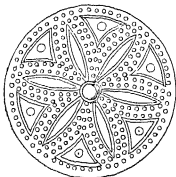
Fig 14. The O'Donovan Shield; Skibbereen, Co. Cork

either by a skewer of bone or wood or metal, or else by a **Brooch.** At some period before B.C. 400 the Gauls of the Danube valley had learned the use of **Bracae,** or **breeches,** from their Scythian neighbours, for it seems not at all probable that the *bracae* were an invention of north-western Europe. These breeches were made of leather or occasionally of some textile fabric. No better illustration of the costume worn by the Gauls in their battles with the Romans can be had than the account given by Polybius[1] of their appearance at the battle of Telamon: 'The Insubres and Boii were clothed in their breeches and light cloaks; but the Gaesatae from vanity and bravado threw these garments away, and fell in in front of the army naked. All the warriors in the front ranks were richly adorned with gold necklaces and bracelets,' the Romans 'were dismayed by the ornaments and clamour of the Celtic host. For there were among them

[1] ii. 28–30.

such innumerable horns and trumpets, which were being blown simultaneously in all parts of their army, and their cries were so loud and piercing.'

It will be noticed that Polybius makes no mention of tunics. It is quite possible that when campaigning the Celtic warriors only wore their *sagoi* and *anaxurides*.

That the *bracae* were often made of some striped material is rendered clear by a famous passage of Propertius [1], who speaks of the chariot, the striped *bracae*, and the gold torque of the Belgic chieftain, Virdumarus.

Turning now to *The Tain* [2] we read that 'Cuchulainn put on twenty-seven skin tunics, waxed, like board, equally thick, which used to be under strings and chains and thongs against his white skin that he might not lose his mind nor his understanding when his rage should come. He put on his hero's battle-girdle over it outside, of hard-leather, hard, tanned, of the choice of seven ox-hides of a heifer, so that it covered him from the thin part of his sides to the thick part of his armpits; it used to be on him to repel spears, and points, and darts, and lances and arrows. Then he put on his breeches, skin-like, silken, with its edge of white gold variegated, against the soft lower part of his body. He put on his breeches of dark leather, well tanned, of the choice of four ox-hides of a heifer, with his battle-girdle of cow-skins (?) about it over his silken skin-like breeches.' His charioteer put on 'his soft tunic of skin, light and airy, well-turned, made of skin, sewn, of deer-skin, so that it did not restrain the movement of his hands outside. He put on his black (?) upper-cloak over it outside: Simon Magus had made it for Darius, king of the Romans, so that Darius gave it to Conchobar, and Conchobar gave it to Cuchulainn, and Cuchulainn gave it to his charioteer' This last passage is certainly a late addition by some scholastic interpolator.

Though in an illumination in the *Book of Kells* a horseman (Fig 15) is seen wearing breeches, it would seem that this garment

[1] iv (v). 10. 39 sqq :

> Claudius Eridanum traiectos arcuit hostes,
> Belgica cui uasti palma relata ducis,
> Virdumari : genus hic Rheno iactabat ab ipso
> Nobilis e rectis fundere gaesa rotis
> Illi uirgatis iaculantis ab agmine bracis
> Torquis ab incisa decidit unca gula.

[2] pp. 87-8. The word *brog*, which Miss Faraday translates 'apron,' following O'Curry, I have rendered 'breeches,' since Zimmer (*Kuhn's Zeitschrift*, vol xxx, p. 81) has conclusively shown that the word means *bracae*.

was not native to Ireland, for even in the fourteenth century the four kings of Ireland who visited King Richard II at Dublin did not wear these garments. The English accordingly had breeches of linen and cloth made for them, but there was 'great difficulty at the first to induce them to wear robes of silken cloth, trimmed with squirrel-skin or minever, for the kings only wrapped themselves up in an Irish cloak [1].' Giraldus (*Top. Hib.* iii. 10) states that the Irish wore breeches ending in shoes, but there is no evidence that this combined garment was used in early times, any more than in the period after him. At most, the statements of Giraldus and Lynch could only apply to a small part of Ireland. Since the kings did not wear breeches, it is very unlikely that that garment was indigenous.

It would therefore appear that the *bracae* were simply intruders

Fig. 15. Irish Horseman, *Book of Kells*.

from Gaul in the La Tène period, and that they did not get any permanent vogue in Ireland.

In the 'Muster of the Men of Ulster' there are many descriptions of the cloaks and tunics worn by the various heroes, including those worn by the men of Muirtheimne, the hereditary patrimony of Cuchulainn. These were men with 'long, fair, yellow hair,' and they wore glossy, long, flowing cloaks with noble brooches (*deilge*) of gold, and had shirts of striped silk.

It will be noticed that Cuchulainn is represented as wearing leather breeches as well as those made of a textile, the leather being for protection. But he also wears a girdle of great breadth to protect his belly from wounds. Now this is no other than the wide girdle used by the Celts of the Hallstatt area and by the Umbrians for the same purpose, and which was also worn by the Homeric Achaeans under the name of *mitra* [2].

[1] Froissart (*John's Trans.*), vol. ii, pp. 579-80.
[2] Ridgeway, *Early Age of Greece*, p. 311, Fig. 58.

Those of bronze found in upper Italy and the Hallstatt area are as much as a foot in breadth at the widest part and taper to the ends which were fastened by catches at the wearer's back. Lineal descendants of these ancient girdles, but made of leather, are still worn in the Tyrol

The reader will have noticed that the cloaks of the Tuatha de Danann warriors are invariably fastened with brooches like the *pallium Gallicum fibulatorium.*

The Celts of the Alps at a date anterior to B. C. 400 developed from their older fibulae, which had but one spring, those furnished with a spring on each side of the bow. They then modified a fibula of a type commonly termed Certosa, found in the Alps and in Bosnia as well as in Italy, by giving it this bilateral spring. This new type, known as the La Tène (Fig. 16), has played a great part in the history of the fibula. It extends from the Danubian

Fig. 16 Bronze Fibula; Marne

Fig. 17. Leaf-shaped Fibula, Navan Rath, Ireland

regions to the valleys of the Seine and the Thames, and even to Ireland, as I have elsewhere shown. At the commencement of the Christian era the La Tène type had given birth to the Roman provincial fibulae, and those in turn were the parents of the brooches, which the Germanic peoples made in the first centuries after Christ in the epoch of the great migrations, and in Scandinavia at a much later date.

It is obviously very unlikely that either tunics, cloaks, or breeches of the La Tène period would have survived to the present time in Ireland, though of course it is not altogether impossible that such may be preserved in some peat bog, like the early garments found in Denmark But I am fortunately able to show that in Ireland some six specimens of the latest forms of the La Tène fibula have been found. One of these found at Navan Rath is of a leaf-shape (Fig. 17), another brooch (Fig. 18), also in the Irish Academy collection, has a double spring and is also leaf-shaped, the veinings in the leaf being indicated. Of the other four specimens two are also from Navan Rath [1].

[1] Ridgeway, op cit., pp 581 sqq, Figs 133-9.

It will have been remarked that no fewer than three of the six La Tène brooches found in Ireland come from Navan Rath, once Emain Macha, the capital of Conchobar himself In the 'Muster of the Men of Ulster,' Conchobar's own mantle is fastened by a brooch of red gold. So too Cuscraid, the Stammerer, Conchobar's son, wore a green cloak folded round him, a brooch of gold over his arm. But, what is much more important for our purpose, (as Mr. Coffey has pointed out to me) Sencha Mac Ailılla, 'the orator of Ulster, Conchobar's chief man, wore a cloak, dark gray, folded round him, a leaf-shaped brooch (*dealg n-duillech*) of white metal over his breast.' Now this epithet closely fits the leaf-shaped brooch (Fig. 17) from Navan Rath, and, still better, another Irish brooch (Fig. 18) which is undoubtedly meant to represent

Fig. 18. Leaf-shaped Fibula, Ireland
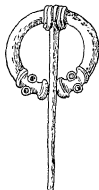
Fig. 19. Penanular brooch; Ireland.

a leaf, as the veining is indicated on its back. The epithet is utterly unsuited to the penanular brooch of the Tara (Fig. 19) and Scotch type, which was so common in Ireland at a later period. But the La Tène brooch was never common in Ireland, as is shown by the scanty number found in that island. Now as the La Tène brooch cannot have lasted in Gaul much later than the Christian era, for it was then completely supplanted by the Roman provincial types, and as it cannot have lasted in Britain much later than A.D. 100, it is most improbable that any bard writing in Ireland at any period much later than the first century A.D. would have represented his heroes as wearing brooches of the La Tène type. It may not be without significance that three out of the six known examples of this type of brooch found in Ireland should have been discovered at the site of the ancient home of Conchobar, the great Tuatha de Danann king,

whose physical characteristics, as we have seen above, are those of the Celts of Britain and the Continent, not those of the indigenous melanochrous race of Ireland.

Gold Ornaments. Polybius[1] tells us that when the Gauls entered Italy, they brought with them an abundance of gold ornaments and large droves of cattle, while the same writer mentions that at the battle of Telamon many of the Gallic warriors were adorned with gold torques. Manlius acquired the name of Torquatus for himself and his descendants from the fact that he put on himself the torque of a Gaul whom he had slain in single combat[2], whilst from the passage of Propertius cited above it is clear that the wearing of such golden torques and collars was characteristic of the Belgic chiefs Though the Museum of the Royal Irish Academy possesses a great wealth of torques and other ornaments of gold, almost all of these belong not to the Iron Age, but to that of Bronze. Indeed, it was only within the last fifteen years that gold ornaments, undoubtedly belonging the La Tène period, were discovered in Ireland. These are the famous gold objects found near Broighter, Co. Londonderry[3]. These were acquired by Mr. R. Day, F.S.A., of Cork, and after being the subject of a long struggle between the British Museum and the Royal Irish Academy, have finally found their permanent resting-place in their proper home, the National Irish Museum. The objects comprised a small boat, a bowl, two chains of very fine fabric, two twisted neck-rings (torques), and a hollow gold collar with *repoussé* designs, 'beyond question the most magnificent object of its kind ever discovered' (Fig. 20). This collar is seven-and-a-half inches in diameter, and the section of its tube is one-and-one-eighth of an inch. The structure of the collar resembles that of one found at Frasnes in Belgium, whilst its curious fastening is similar to those found in some gold torques from Servies-en-Val, near Carcassonne, what was once the land of the Volcae Tectosages. The ornament consists of *repoussé* and engraved lines filling the vacant spaces in the interstices of the raised ornaments. These fine lines are curved and form more or less concentric groups. They were in nearly all cases executed with a compass, and they illustrate the process by which the harmonious curves of *repoussé* ornament were first sketched out. 'This compass-work, which must have also been employed in the original design of the *repoussé* ornament itself, plays a very important part in "Late-Celtic" ornament. It is well known on the mirrors, sheaths, and other objects of metal-

[1] ii. 19 [2] Livy, vii 10
[3] A. J Evans, *Archaeologia*, vol lv, pp 397–408

work, and has recently been found applied to woodwork decoration in the Glastonbury Lake-village, a fact which shows that the art had attained considerable development in our island before the Roman conquest of that part of Britain. But the best illustration of compass-work designing is supplied by the objects discovered in the so-called tomb of Ollamh Fodhla. A number of bone flakes
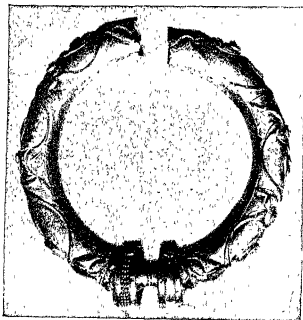
FIG. 20. Gold Collar, Co. Londonderry[1].

were there found ornamented with a quantity of compass-work figures, and iron compasses were found with them[2].'

In the story of the making of Cuchulainn's shield, the poet tells us that the artificer designed its ornament by the aid of a 'two-pronged fork,' i.e. a pair of compasses[3], 'one of the prongs of which he planted in the ashes and with the other described the devices that were to be engraved on Cuchulainn's shield.' As compass-work was characteristic of the La Tène period, is found on works of art in Ireland, and the compasses themselves have been found associated

[1] From a photograph kindly made for me by my friend Mr. George Coffey.
[2] Evans, loc. cit.
[3] O'Curry, *Manners and Customs, &c.*, vol. ii, p 329.

with such work in the story of the making of Cuchulainn's shield, we have no late fragment but a passage written originally by one who was intimately acquainted with the methods of ornamentation used in the La Tène period.

The absence of any mention of gold torques or collars in the description of various costumes enumerated in the 'Muster of the Men of Ulster' is very noteworthy. But it is in strict conformity with the fact that scarcely any gold ornaments of the La Tène period have been found in Ireland.

Now as nothing could be more tempting to a poet of a later date than to array his heroes with golden collars, the writer of *The Tain* refrained from ascribing such adornments to his characters because he simply described what he saw; and as such ornaments were very rare in Ireland in the La Tène period, the poem first probably originated in that epoch.

Writing The Gauls had learned to use the Greek alphabet from the people of Massalia, and though after the Roman conquest of Provence they gradually adopted the Roman script, yet Greek letters continued to be used occasionally in inscriptions on their very numerous and important series of coins. Many Gallic inscriptions are now known both from France and Italy, whilst Caesar[1] tells us that after the overthrow of the Helvetii he found in their camp records written in 'Greek letters' (*litteris Graecis*). He also mentions that his soldiers intercepted a dispatch sent by one Gaulish chieftain to another, and that it too was written in Greek letters (*litteris Graecis*). When the Belgic tribes settled in Britain, they brought with them the art of writing, and though most of the British coins are uninscribed, a considerable number bear inscriptions in some of which the Greek theta is to be met, as, for instance, in the names Addedomarus and Antedrigus, but the coins of Cunobelin, Tasciovanus, and others show that the Belgic alphabet was practically the Latin

That the Irish had the art of writing at an early date is proved by the existence of many inscriptions in the Ogham script, which is, as is now generally admitted, based upon the Latin alphabet, which, as I have just pointed out, had practically become the alphabet of the Gauls and the Belgic tribes of Britain by the Christian era. There is, therefore, no reason why Belgae who settled in Ireland in the first two centuries preceding the birth of Christ should not have carried with them the art of writing which they were practising in their old homes.

[1] *B G.*, i 29 1; cf vi. 14. 3.

Ogham inscriptions contain linguistic forms of Irish words identical with those found on Gaulish inscriptions, and which are older than the forms known in the oldest Irish glosses. On this ground Dr Whitley Stokes[1] holds that some of the people of these islands wrote their language before the fifth century A. D., the date of the introduction of Christianity into Ireland. But the fact that not only the Gauls, but also the Belgic tribes of Britain were making a free use of writing in the Latin alphabet before the Christian era, combined with the antiquity of the forms in Ogham script, renders it highly probable that the art of writing had reached Ireland from Gaul or Britain at a time anterior not merely to the introduction of Christianity, but even to the birth of Christ. As the Gauls of the La Tène period had the art of writing, it would be indeed strange if there were no allusions to it in the oldest epic, supposing it to belong to that period, whilst, for the reasons just given, the mention of letters does not in the least necessitate that any passage in which such a reference occurs should be later than the first century before or after Christ. *The Tain* does contain such a reference[2]. 'Then they reached Mag Mucceda. Cuchulainn cut an oak before them there, and wrote an ogham in its side. It is this that was therein: that no one should go past it till a warrior should leap it with one chariot. They pitched their tents there, and come to leap over it in their chariots. There fall thereat thirty horses, and thirty chariots are broken. Belach n-Ane, that is the name of that place for ever.'

Several other classes of evidence may be cited in favour of the existence in Ireland of a people who had the culture of the La Tène period, though I may not as yet be able to point to such usages or objects in the oldest epic.

Cremation. The Celts of the Hallstatt period and their Umbrian brethren practised cremation, and though in the first part of the La Tène period in Gaul inhumation seems to have prevailed in the valleys of the Marne and Seine, yet by Caesar's time cremation was the regular way of disposing of the dead. The Belgic cemetery discovered at Aylesford in Kent also puts it beyond doubt that the Belgae of Kent had the same usage.

Cremation never got much hold in Ireland, though in various parts of that country, more especially in the north-east, urns containing human remains have come to light. The practice seems to have died out before Christianity came in, for though there are many accounts of the burials of great personages, there is no record of any case

[1] *Three Irish Glossaries*, lv–lvi, Joyce, op. cit., vol. i, p. 400.
[2] p. 35 (Faraday).

of cremation. The only certain reference to its practice occurs in an ancient Irish canon, written or rather copied in the end of the seventh or the beginning of the eighth century, but then attributed by the writer to the time of St. Patrick (fifth century)[1]. The old writer, in referring to different forms of burial, alludes to the cremating of the body as if it were an ancient practice of which tradition alone survived.

Though we cannot cite any tradition to connect the practice of cremation with the fair-haired Tuatha de Danann, nevertheless a curious piece of archaeological evidence indicates that it was introduced by people of the La Tène period from Gaul.

In 1903 Mr George Coffey[2] found in the centre of a small tumulus near Loughrea, Co. Galway, a cremated burial 'on the level of the old surface of the ground It rested on a rude block of stone, and consisted of an almost plain urn inverted over the burnt bones. Directly above the bones lay the skeleton of a woman with its head to the west, and beside it were the remains of a small horse, which lay on its left side with the head to the west,' and which had been probably buried along with the human body. The woman was probably a slave killed to be the guardian of her master's grave. The practice of killing a female slave and not burning her body, in order that her spirit might keep watch over the cremated remains of her lord, is well known from the Early Iron Age cemeteries of Este and Bologna[3].

Now the practice cannot have been indigenous or it would certainly have continued until suppressed by Christianity, and accordingly we must look upon it as having been merely introduced from some other country. But as the Celts of Gaul and Britain were practising cremation, and as we have traditions of invaders from Gaul, and as Conchobar and his people agree in physique, dress, and arms with the Celts of the La Tène period, we have another argument for the existence in Ireland of a people with that culture.

Horses. By the time of Caesar the Gauls were famous for their horses, and in the Roman writers of the age of Augustus there are constant references to the Gallic *manni* which were brought to Rome from Liguria and Provence. The remains of Helveto-Gallic horses have been found on the site of the settlement of La Tène, and the measurements of these animals correspond very

[1] Joyce, op cit, vol ii, p 547.

[2] *Proc Roy Irish Acad.*, vol. xxv, see C, no. 2, p. 14; Ridgeway, *Origin and Influence of the Thoroughbred Horse*, pp. 398-9.

[3] Ridgeway, *Early Age of Greece*, vol. i, pp. 497, 505.

closely with those of the modern *camargues* of Provence. The latter, I have endeavoured to show[1], are descended from the ancient *ginni* or *manni* of the Ligurians, and are usually grey in colour. Now it is curious to note that the measurements of the horse found in the tumulus near Loughrea[2] correspond very closely to those of the horses found at La Tène and to those of the modern grey *camargue* of Provence.

I have shown[3] that before Roman times there were already in Gaul two breeds of superior horses, the one grey, the other black; the former is represented to this day not only by the *camargues* of Provence, but by the famous grey Percherons, the latter by the horses of Ariège, of Auvergne, of Morvan, and of Brittany, all of which are closely related to the old Irish horses known as Hobbies, whose posterity still survives in some Connemara ponies. That these horses had got into Ireland at a very early date is made certain by various considerations. A description of Cuchulainn's horses is given in the *Wooing of Emer*[4]: 'They were alike in size, beauty, fierceness, and speed. Their manes were long and curly and they had curling tails. The right-hand horse was a grey horse, broad in the haunches, fierce, swift, and wild; the other horse jet-black; his head firmly knit, his feet broad-hoofed and slender.' 'That was the one chariot which the host of the horses of the chariots of Ulster could not follow on account of the swiftness and speed of the chariot and of the chariot-chief who sat in it.'

As I have shown[5] that black and grey horses are the result of blending the North African horse (e. c. *Libycus*), which is bay, with the indigenous dun horses of upper Europe and Asia, the horses of Cuchulainn could not be any indigenous Irish breed, but were, as their description shows, a far superior stock to the ordinary horses known in Ireland. But as their colours tally with those of French breeds which date from the La Tène period, and the measurements of the horse found with cremated remains near Loughrea correspond to those of the horses of La Tène itself, Cuchulainn is thus the owner of horses of the typical La Tène breeds, whilst the practice of cremation is found in close connexion with the remains of such a horse.

Trumpets. There can be no doubt that the Celts of the La Tène period regularly used horns or trumpets in war. At the battle of Telamon they had a vast number of men who sounded horns

[1] *Origin and Influence of the Thoroughbred Horse*, pp 321, 399.
[2] Scharff, *Proc. Roy Irish Acad*, loc. cit
[3] Ridgeway, *Thoroughbred Horse*, pp. 323 sqq.
[4] pp. 197-8 (trans.).
[5] *Thoroughbred Horse*, p. 261.

(βυκάναι) and trumpets (σάλπιγγες)[1], the former being a curved instrument, like the Latin *bucina*, borrowed by the Romans, the latter probably straight with curving mouth, like the Roman *lituus*. Diodorus[2] also mentions the Gallic trumpets (σάλπιγγες), though he makes no mention of the *bukane*, whilst works of art show us the Gallic war-horn at a still earlier period. Thus it appears on coins[3] struck by the Aetolians after the repulse of the Gauls from Delphi in B. C. 279. It also appears lying on the ground beside the famous statue of the Dying Gaul.

In Ireland a considerable number of bronze horns have been found (Fig. 21), the Royal Irish Academy Museum possessing no fewer than twenty-six, whilst there are a good many examples in the British
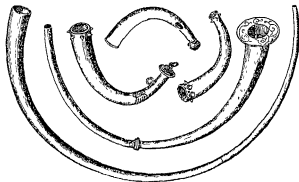
FIG. 21 Bronze Trumpets, Ireland[4].

Museum, and others scattered in private collections. They are of two kinds. In the first (A) the instrument was cast in a single piece; in the other (B) it was formed by bending and riveting together sheets of metal. Class A falls into three subdivisions: (1) those blown from the smaller end, (2) those inflated by a lateral opening near the smaller extremity, which ends in a solid boss, (3) a straight tube with curved mouth (*lituus*). As horns were comprised in the find at Dowris, King's Co., which from the celts with sockets of oval form and other considerations must fall late in the Bronze Age, though not at its end, there can be no doubt that bronze horns were already in use at that period in Ireland. Again, as both forms of Class A were included in the Dowris find (probably the hoard of a bronze-founder), it is clear that the type with the lateral opening

[1] Polybius, ii. 29. [2] v 30 [3] Head, *Historia Numorum*, p 284.

[4] For the use of this and the following block I have to thank the Council of the Royal Irish Academy.

was already known at that epoch, though we may assume with safety that it was later in origin than the other, which is simply the cow's horn translated into bronze. But it is more than highly probable, as is held by Sir John Evans[1], that a considerable number of the known specimens belong to the Iron Age. For example, in 1794, four horns were found in a bog near Armagh, one of which, measuring 6 feet long, has at its larger end a disc embossed with the scroll-pattern characteristic of the La Tène period (Fig. 22). This specimen, as well as another from Co. Down measuring 8 feet 5 inches in length, is made by bending and riveting thin sheets of bronze. Though the
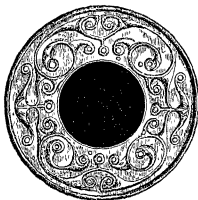
Fig. 22. Mouth of La Tène Trumpet, Armagh, Ireland

larger specimen has no distinctive ornament, we may infer from its form and technique that it also belongs to the La Tène epoch.

As the decorated horn was found near Armagh—the very district in which was situated the capital of Conchobar—from whence also three of the La Tène brooches above mentioned have come, the coincidence seems to be not without significance.

As no riveted horn and hardly any cast examples have been discovered in Britain, we may infer that Ireland was in direct communication with Gaul, not only in the La Tène period but even in the Bronze Age, and accordingly did not depend on Britain for her forms of Continental culture. But the question naturally arises, Why did not the Belgic tribes of Britain introduce the horn into that island when they came thither from Gaul? The explanation is probably due to the circumstance that the Irish derived their bronze horns from Central France, most likely from the mouth of the Loire from the inhabitants of Gallia Celtica. It is in the hands of Gauls

[1] *Bronze Implements*, p. 362

who are declared to have passed into Italy and elsewhere from that region that we meet them in classical authors and in works of art On the other hand, as England was invaded by the tribes from Gallia Belgica, who were Cimbrians who had crossed the Rhine at quite a recent date, and as no bronze horns like the Irish are found in Scandinavia, we may conclude that the Belgae, unlike their kins-

FIG 23. Carved Stone, Turoe, Co Galway

folk who had entered Gaul centuries before and had settled and become the overlords of the indigenous population of Central Gaul, did not use bronze horns.

Carved Stones. Within the last few years another class of La Tène monument has been discovered in Ireland. In 1903 Mr. George Coffey[1] described a stone first noticed by Lord Walter Fitzgerald at Mullaghmas, Co. Kildare, which is now deposited in

[1] *Proc. Roy Irish Acad*, vol. xxiv, Section C, no 14 'Some Monuments of the La Tène period recently discovered in Ireland' (all three being well figured)

the Royal Irish Academy collection. The carving on the stone is of the type commonly known as 'trumpet' pattern in Ireland. In the same year Mr Coffey's attention was called by Mrs Coote, of Carrowroe, to a stone at Castle Strange near Roscommon, which also proved to be carved with 'trumpet' pattern, but 'this time the La Tène character of the ornament was unmistakable.' Soon after this Mr. Coffey found a third stone at Turoe near Loughrea, Co. Galway, the most remarkable of the three examples, being richly carved with La Tène ornament in bold relief (Fig. 23)[1].

Whilst in the case of objects of a portable character it might be argued that they were 'wanderers' from Britain or from Gaul (as was maintained in the controversy over the famous gold ornaments mentioned above) and accordingly cannot be taken as any proof of the settlement in Ireland of Celts, it would be absurd to contend that these ponderous stones were wrought in Gaul or Britain, where none such have as yet been found, and were thence shipped to Ireland. Since the Irish craftsmen could develop new types for themselves, as is proved by the riveted trumpets, there is no reason why they could not hew and carve these three most noteworthy *stelae*.

From this survey of the material remains of the La Tène period found actually in Ireland, and from the striking correspondence between this culture and that depicted in the *Tain Bo Cuailnge*, and from the further circumstance that the race who are represented in the epic as possessing this form of culture resemble, in their physique, the tall, fair-haired, grey-eyed Celts of Britain and the Continent, we are justified in inferring (1) that there was an invasion (or invasions) of such peoples from Gaul in the centuries immediately before Christ, as is asserted by the Irish traditions, and (2) that the poems themselves originally took shape when the La Tène culture was still flourishing in Ireland. But as this could hardly have continued much later than A.D. 100, we may place the first shaping of the poems not much later than that date and possibly a century earlier[2].

[1] My illustration (p. 167) is from a photograph which Mr. Coffey has kindly taken for me from the cast of the stone now in the Irish Academy collection, whose views on the subdivision of cast trumpets I have also followed.

[2] I must acknowledge my debt to my friend Mr. E C Quiggin, Fellow and Lecturer of Gonville and Caius College (author of *A Dialect of Donegal*) for his generous help on various linguistic points.

THINGS AND SENSATIONS

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Read, May 31, 1905

1. The Problem, negatively determined.

The philosopher cannot legitimately raise the question—Does matter exist? He can only start like other people on the basis of ordinary experience; but the existence of a material world is a constant and essential presupposition of all ordinary thought and conduct. Thus, philosophical inquiry can relate only to the nature of matter and of our knowledge of it, not to its existence. We may not ask—Is there an external world? but we may ask—*What* is the external world, and how do we know it? Yet, even in this direction, our inquiry is limited by definite conditions. Philosophical theory concerning the nature of matter is bound to include and explain those characteristics of matter which are essentially presupposed in the ordinary procedure of common-sense and physical science.

Philosophical problems of this kind must be such as arise inevitably out of the organized body of pre-philosophical knowledge. In the present paper I propose to deal with such a problem, that of the connexion of material things with what we call their appearance to the senses.

2. The Problem, positively stated.

If we cross-examine common-sense and science on this topic, we obtain two results which, taken as they stand, are in apparent conflict with each other. From one point of view, things and their sensible appearances coalesce in indivisible unity. From another point of view, the sensible appearances have an existence and history separate from the existence and history of the things. The problem is to harmonize these apparently conflicting views while doing justice to both.

3. Unity of thing and sensible appearance.

In ordinary perception, we do not, in general, make any distinction between the thing perceived and its sensible appearance. When we see a table, we seem to have cognizance only of the table itself, we

are not also aware of something else which we call the visual presentation of the table. It is only through critical reflection that we are enabled to distinguish the visual presentation from the table itself. And even when we do recognize the distinction, we are still unable to separate mentally thing and sensible appearance so as to set them side by side as mutually exclusive entities They still continue to be blended in inseparable unity, and the distinction between them is only a distinction within this unity.

If we turn from actual perception to ideal representation, we obtain the same result. Our ideas and concepts of material things and processes owe all their specific content to sense-presentations. Their nature is determined for thought only in terms of qualities and relations belonging to visual, tactual, and other sensations. The extension of matter, for example, has no meaning for us apart from our experience of the extensiveness of visual and tactual sensations. Similarly the motion of material things has no meaning apart from our experience of the displacement of visual sensations within the general field of visual sensation, or of tactual sensations within the general field of tactual sensation.

We may then conclude that, both for perception and ideal representation, matter and its sensible appearance form an inseparable unity. We cannot think away what belongs to the sensible appearance without thinking away matter itself.

4. Separate existence of things and their sensible appearance.

None the less, however intimate the unity of matter and sensible appearance, the existence of the one is not numerically identical with the existence of the other. On the contrary, we are compelled by overwhelming evidence to recognize that, in this respect, they are relatively separate and independent. The visual appearance of a thing may vary indefinitely in size, shape and colour, without any corresponding variation in the thing itself. Similarly, when we see a thing moving, the displacement of the visual presentation within the field of view is more or less rapid according to the varying distance of the thing seen. But the thing seen does not, on that account, move more or less rapidly. Now if X exhibits changes and variations which are not shared by Y, X and Y must be distinct existences. And this argument holds good for all other senses as well as for sight. Physiology here supplies us with a general formula. The variable nature of sense-experience corresponds immediately not with the constitution and changes of the material world in general, but only with the constitution

and changes of the small fragment of matter which we call a nervous system. Alter this, let us say, by the use of drugs, and the sensible appearance of perceived things may be profoundly modified without any corresponding alteration in the things themselves.

We reach the same result by considering the connexion of sensations with mental images. Plainly the existence of mental images is distinct from the existence of bodily things. Their waxing and waning in distinctness, their changes of quality, their coming and going, &c., are occurrences that cannot be identified with events happening in the external world. But sensations are continuous in their existence and history with images. They are continuously connected with them through such intermediate links as after-images and primary memory-images, and the varying grades of hallucination. Hence, sensations must also have an existence distinct from that of external objects.

The same conclusion is forced upon us by the private and incommunicable nature of sensations. When *A* and *B* perceive one and the same material thing, the sensations experienced by *A*, however much they may resemble *B*'s sensations, have, none the less, a separate existence from *B*'s sensations. There is only one perceived thing; but its sensible appearance is not correspondingly single, hence, the sensible appearance presented to *A*, and that presented to *B* must not only be numerically distinct from each other, but also from the thing perceived

For these reasons we seem bound to accept the position that the existence of sensible appearance is distinct from the existence of the things which present these appearances. But, on the other hand, we seem equally bound to recognize that the sensible appearance as such is fused in inseparable unity with the thing. Our problem is to reconcile these two views. And there seems only one course to follow. We must inquire into the nature of the connexion between sensation and thing, on account of which the sensation is called the sensible appearance of the thing—the appearance of the thing to the senses. What does the word 'appearance' mean in this context?

5. The sensible appearance, not merely the thing itself appearing.

At this point, it is necessary to consider a certain way of answering this question, which, if it were true, would imply that the question itself arises out of mere confusion of thought. I have proceeded on the assumption that the sensible appearance is itself something which

appears or is known, and I have contended that this something has an existence distinct from the material thing perceived. Now a critic may here accuse me of a twofold error. He may say —

> In affirming the distinct existence of thing and sensible appearance, you confuse appearance in the sense of what appears or is perceived with appearance in the sense in which it merely means the fact of appearing or becoming perceived. On the other hand, if you insist on meaning by appearance something which appears, you are wrong in asserting the distinct existence of material thing and sensible appearance. The distinction is not a distinction between two existences It is a distinction between the material thing as known in a relatively fragmentary and erroneous way with the same thing as known more fully and correctly.

The points raised in this hypothetical criticism are of the utmost importance. Unless we come to clear understanding in regard to them the problem we are discussing will be affected with fatal ambiguity, precluding the possibility of a satisfactory solution.

What lends plausibility to the criticism is simply its vagueness and generality. It breaks down when we bring it to the test of facts by examining simple instances of the distinction between sensible appearance and material thing. I look at a candle flame, and, in doing so, I press against my right eyeball so as to displace it; immediately I become aware of two visual appearances instead of one. One of the visual presentations dances up and down as I move my eyeball while the other remains at rest. Now it is plainly nonsense to say that what I call the doubleness of the visual appearance simply means that I perceive the single candle twice, or that it appears to me twice. What I am aware of is two separate objects, one of which moves while the other is unmoved. The case is not comparable to my recognizing that $2+2=4$ to-day, and again recognizing the same truth to-morrow. I am aware of two actual existences each with its own positive nature; I am not merely aware of the same existence twice over. Again it is nonsense to say that the doubled visual appearance is the candle-flame itself as imperfectly apprehended by me. On this view the imperfect apprehension must involve a positive error. For the imperfection would consist in apprehending as two what is really one. But in fact there is no such misapprehension. I know quite well that there is only a single candle-flame, and yet the two visual appearances persist unaffected by this knowledge. But a mistake vanishes when it is corrected. The doubleness of the visual appearance is, therefore, an actual fact and not an error or illusion.

Consider, next, the visual appearance of the full moon as seen from the earth's surface. This is certainly not a mere appearing but something which appears—a silvery patch with a perfectly determinate

shape and magnitude. Are we then to say that this something which appears is just the moon itself as imperfectly apprehended? It is certainly true that merely looking at the moon gives us a very imperfect and erroneous notion of it. A child, for instance, may take it to have a flat surface about as big as an ordinary dinner-plate. But when this impression is rectified by full astronomical knowledge, the visual appearance, as such, remains just as it was before. It still, for example, has a determinate magnitude which can be by no means identified with the magnitude of the moon, either as rightly or as wrongly apprehended. The identification is impossible, not because the visual magnitude is smaller than that of the moon, for this is really a meaningless statement; the identification is impossible because the two magnitudes are, in principle, incapable of being compared. The visual appearance of the moon cannot be compared as regards its magnitude either with the moon itself, or with any other material thing. It can only be compared with other visual appearances as such. It is nonsense to say that it is as big as a plate or a half-crown But it may be quite true that it is as big as the visual appearance of the plate when the plate is a certain distance from the eye, and it may be at the same time equally true that it is as big as the visual appearance of a half-crown, when the half-crown is at a certain distance from the eye When compared with other visual appearances it has a quite definite and definitely measurable magnitude. It occupies a determinate portion of the total field of visual sensation. It may itself be used as a unit of measurement· thus Helmholtz estimates that the portion of the field of visual sensation which would correspond to the blind spot is equal to many full moons. Now, if this extensive magnitude of visual appearance is not even comparable with the extensive magnitude of material things, it cannot be identified with the extensive magnitude of material things, however imperfectly or erroneously apprehended.

Arguments of this type seem fully to justify us in regarding sensible appearances as having an existence and a positive nature of their own, distinct from material things and their attributes, however imperfectly and erroneously these may be apprehended. The sensible appearance is itself something that appears, and this something is not matter; it is not even matter appearing in a fragmentary and distorted way.

We have then stated our problem accurately in making it a question of the relation of two distinct existences. What we have to discover is how it is that that one of these existences—the sensible appearance—so interpenetrates the other—the material thing—that apart from it there would be no material thing.

6. The independent not-self.

The first attempt to solve this problem, in modern times, is best represented by Locke. It consists in regarding sensible appearance as representing the material world as a reflection in a mirror represents the reflected surface. All that we directly know is, not matter itself, but an image or copy of it. And this image or copy of it is not even accurate. It is intermixed with elements which do not resemble any attributes of matter. Such elements are sensible colour, heat, odour, sound and the like. On the other hand, extension and motion are really properties of matter, but we do not in any ordinary sense of the words perceive them or directly know them. We only perceive certain qualities of our sensations which resemble them. This doctrine is obviously indefensible. It makes impossible the knowledge which we actually possess of material things. If it were true, we should never even be able to compare the nature of matter with the nature of sensible appearance, so as to judge of their resemblance or difference.

Another and a widely diffused type of theory arises from acceptance of one of the propositions on which the Lockian doctrine is founded, together with the rejection of the other. The proposition that we directly and positively know only sensible appearance is accepted. The proposition that we do not know matter directly and positively is rejected. But if matter is directly or positively known, and if all that we directly and positively know is sensible appearance, it follows that matter and its sensible appearance must be identical. This is the doctrine maintained in its purest form by Berkeley and Mill, and also, though with very important modifications, by many writers who draw their inspiration from Kant. What is essential to it is the assertion that actual existence belongs not to matter in any sense in which it can be distinguished from sensation, but only to sensations as they come and go in individual experience. The ordinary distinction between thing and sensation becomes, on this view, a distinction between sensations actually experienced and a systematic order which comprehends not only actual but possible sense-experience. Thus the material world, so far as it is distinguishable from sensible appearance, consists, according to this doctrine, in unrealised possibilities. There are two fatal objections to such theories. In the first place, the material world, as essentially presupposed in the procedure of common-sense and science, is not a system of possibilities, but of actual existences, persisting, changing and acting on each other. In the second place,

the supposed fixed and uniform order of possible sensations is a fiction, if it be regarded as belonging to sensations as such, apart from a material world, assumed to exist independently of the sensations, and in particular a sentient organism interacting with a material environment. This last objection is evaded by remodelling the theory on Kantian lines. The distinction between matter and sensible appearance is then drawn in a different way. Matter is regarded as an ideal construction for which the material is supplied by the content of sense-presentation. But the construction takes place according to certain universal principles or rules of synthesis, which determine connexions quite independent of the coming and going of actual or even of possible sensations in individual experience. Such principles are those of Causality, Substance and Reciprocity, as formulated by Kant. The content of sense-experience, elaborated according to such rules of combination, yields an order which is objective in the sense that it is independent of the vicissitudes of the private history of any individual mind. This doctrine has certainly great advantages as compared with Berkeley's or Mill's. It shows how and why the nature of sensible appearance so interpenetrates the nature of matter that apart from sensible appearance there would be for us no matter. So far, the Kantian seems to me to stand on solid ground. On the other hand he is also successful in showing that in his view the being of matter must be distinct from and relatively independent of the being of sensible appearance. But, as regards this second point, the explanation offered appears to me to be defective. It is defective because the *kind* of being which it ascribes to matter is not the kind of being which belongs to matter as we know it. Matter as we know it is an actual existence, enduring, changing, acting, and being acted on. It cannot, therefore, be a conceptual order in which content is divorced from existence. It is absurd to suppose that the mathematician may awake some morning and find that his perfect fluid has become viscous during the night. Similarly, if my fire is merely an ideal construction, using the content of sensation as its material, it is nonsensical to suppose that leaving it burning brightly I can return and find that it has gone out.

Plainly Kant's own unknowable thing, *per se*, can be of no use here. What we require is a system of actual existences which are at least known as enduring, changing and interacting, and known as connected in the most intimate way with our sense-experience. Matter can only be constituted by the qualification of such actual existences by the content of sensible appearance. This, no doubt, involves, even from the outset, a process which, in a wide sense of the

term, may be called 'ideal construction.' But the construction must be a *construing*—a construing in terms of sensation of the nature and behaviour of an actual existence other than sensation or any immediate experiences of the individual.

Let us call this actual existence the independent not-self.

7 THE INDEPENDENT NOT-SELF IS NOT UNKNOWABLE.

At this point we reach a critical stage in our inquiry. We are confronted by the question—'How is the independent not-self in the first instance known?' How, indeed, can it be known since it confessedly transcends experience?

I reply that it does not transcend experience in any sense which could make it unknowable. It does, indeed, transcend purely immediate experience. But purely immediate experience is transcended in all knowledge, even in the knowledge of sensations and of subjective states.

By purely immediate experience I mean such experience as we have of a toothache, in so far as at any moment it is actually being felt, or of a sound, in so far as at any moment it is actually being heard. Past toothaches or past phases in the history of the same toothache may indeed be known; but they are not immediately experienced at the moment in which they are known Immediate experiences in this sense are cognate accusatives after the verb 'to experience.' In this sense we speak of experiencing a toothache as we speak of jumping a jump. To experience a toothache is to experience a certain kind of experience. Such immediacy does not include any distinction of subject and object. The experiencing is distinguished from the content experienced only as colour in general is distinguished from this or that special colour.

In this strict sense of immediacy, being immediately experienced is not the same as being known. On the contrary, it would seem that purely immediate experience neither does nor can *by itself* constitute an object of knowledge. The toothache which I know is not merely the momentary phase of it which I am immediately feeling, it also embraces past phases which I am not immediately feeling. It is known to me, for example, as having duration, and as having changed in intensity and otherwise. The immediate experience is known only as related to what at the moment is not immediately experienced. Otherwise, there would be no distinction of subject and object, and consequently no knowledge. On the other hand, the constituents of the known object which are not immediately experienced are known only through their relatedness to immediate

experience. Ultimately it is immediate experience which determines and specifies them for thought. Immediate experience, being essentially fragmentary, points beyond it, so that in knowing it we *ipso facto* know that to which it is related. And the relation must in each case have a specific character implied in the specific nature of the immediate experience.

From this point of view, it is convenient to speak of the immediate experience as 'representing' or 'standing for' what is not immediately experienced. But representation in this sense must be carefully distinguished from representation which presupposes a previous independent knowledge of what is represented, and an examination of its relation to that which we regard as representing it. A memory-image does not represent what is remembered as a photograph represents a person. We are not enabled to remember by first ascertaining that the memory-image is representative. On the contrary, it is only because we have already remembered by means of it that we are justified in regarding it as representative.

The distinction between purely immediate experience and what it implies is a distinction which is drawn only by reflective analysis. For ordinary unreflective consciousness the two coalesce in distinctionless unity. In listening to a sound—e.g. a crescendo or diminuendo note—I do not, explicitly, discriminate the phase of the sound which is being immediately heard from the sound as a whole. So, in remembering a past experience, I do not, normally, discriminate the memory-image from the experience remembered.

Even when the distinction comes to be made in critical reflection, it cannot take the form of a distinction between premiss and conclusion, so as to constitute what we ordinarily call an *inference*. For inference involves the logical transition from one cognition to another cognition. But the kind of mediacy with which we are here dealing is essential to the being of any cognition at all. It does not belong to the development of knowledge. Rather, it is necessary to constitute the germ from which knowledge may develop.

Yet, though we may not call it inference, it would be a far graver error to speak of it as 'instinct' or as 'isolated intuition.' Like inference, it has its ultimate ground in the unity and identity of the Universe, in virtue of which knowledge of a part is partial knowledge of the whole to which it belongs. Each individual at any moment apprehends the universe in its unity from his own limited and peculiar point of view. This point of view is ultimately determined for the individual at any moment by the nature of his immediate experience at that moment. His immediate experience, as it were, radiates from

itself a halo of implications, and in this way primary knowledge is constituted. Such primary knowledge may then mediate further knowledge by way of what we call Inference [1].

Returning to our special problem, I would suggest that the independent not-self is known from the beginning of conscious life, not indeed by inference, but as a direct implication of immediate experience. The case is indeed different from those I have so far considered. I have, so far, referred only to instances in which the immediate experience of the moment points beyond itself to other immediate experiences past, future, or merely possible, of the individual knower, but the independent not-self is other than any actual or possible immediate experience of the individual who knows it The distinction is undeniable. But I cannot see that it is relevant to the question at issue. The only assignable ground why the immediate experience of the moment points beyond itself is the unity of the universe. It is purely arbitrary to substitute here for the unity of the universe the partial and imperfect unity of the individual. The individual is himself merely a fragment of the universe without any self-contained being. We may therefore assume that from the beginning of his conscious life there must be features of his immediate experience which point beyond themselves to existence other than his own, or than any or all of his immediate experiences.

The opposite view leads to insuperable difficulties. If we start by assuming that the individual is initially confined within the circle of his own immediate experiences, it seems impossible to discover how he could ever get beyond them, so as to know matter or other minds. He could only do so by inference But all explanation of this kind seems necessarily to involve *petitio principii*. For, though inference yields new knowledge, yet this new knowledge is always a further determination of what we already know indeterminately. In inference we do indeed transcend our data, but only by a continuous develop-

[1] The necessity for this specifying function of purely immediate experience is best seen when we consider the meaning of such words as 'now,' 'here,' and 'this.' How is the meaning of such words determined for thought? Ultimately by immediate experience not as known or thought of, but merely as immediately experienced. The word 'now' applies to an indefinite number of 'nows.' The 'now' referred to, in any particular instance of its use, is determined for us as the moment of actual experience But it is not determined by the logically prior cognition of such actual experience. For the term 'actual experience' shares the ambiguity of the term 'now.' If we ask what actual experience is referred to, we can only answer 'that which *now* exists,' and are thus involved in a vicious circle. The only possible escape lies in the doctrine that it is not the thought of the actual experience which particularizes the 'now,' but the actual experience itself as it immediately exists.

ment of our data. Thus, if we presuppose that an independent not-self is already known, however vaguely, inference will enable us progressively to define and specify it. But inference cannot yield our primary knowledge of an independent not-self.

On the contrary, we must recognize that, from the outset, there are features of our immediate experience which perpetually point beyond themselves to actual existence, other than our own or than any immediate experiences of ours.

8. Positive account of our knowledge of the independent not-self.

What are these features of immediate experience. Here I must confine myself to a brief indication of my own view without attempting to defend or develop it in detail. I agree with those who find the key to our knowledge of an independent not-self in our awareness of passivity in undergoing sensations, in combination with our awareness of activity in determining what sensations we shall undergo.

Our passivity in having sensations occur to us involves an agent which determines their occurrence. Our activity in getting, keeping, or discontinuing sensations implies that we in our turn act on this agent, so as to determine what sensations it shall generate. Thus, in both ways, coincidently, we are from the commencement perpetually dealing with an independent not-self, whose activity is, so to speak, the other side of our passivity, and whose passivity is the other side of our activity.

But we must not regard our knowledge of the independent not-self as due to an inference. It cannot be that we start with the premiss, 'I am passively affected,' and from it proceed to the conclusion, 'therefore there is something active in relation to me.' Any attempted explanation of this sort necessarily involves a vicious circle. For we cannot apprehend our passivity without *eo ipso* apprehending something as active in relation to us. Thus the supposed conclusion is already an integral part of its supposed premiss.

There is indeed an element of mediacy in our cognition of the independent not-self. But the mediacy is already contained in our awareness of passivity in undergoing sensations, and of activity in getting them. These cognitions have the complexity which belongs to all cognition. They contain features of immediate experience which, owing to their fragmentary nature, cannot by themselves be distinct objects of knowledge, but can only be known as related to something which is not immediately experienced. And, owing to the

peculiar nature of these immediate experiences, the correlate, which is necessarily known in knowing them, is the independent not-self.

9. Our knowledge of matter.

The independent not-self is not matter. It only furnishes one constituent of the complex unity which we call matter. Matter also essentially includes the qualification of the independent not-self by the content of sense-experience. It follows from the mode in which the not-self is known that it is from the outset so qualified From the outset, it is known as related in specific ways to sense-experience. In this sense, we may speak of it as 'represented' in terms of sense-experience. And this representative function of actual sensation forms the necessary basis of the ideal construction, or construing, through which our knowledge of the material world develops.

But we must hasten to add that, primarily, there is no explicit distinction between representation and what is represented any more than there is primarily any explicit distinction between our immediate experience in remembering and the experience remembered. Such distinctions only emerge in critical reflection, and they only become fully clear to the philosopher. For primitive consciousness and for our own unreflective consciousness, sense-experience and the correlative agency which conditions it coalesce in one unanalysed total object. They coalesce in such a way that the sense-presentation appears as possessing the independence of the not-self, and the independent not-self seems to be given with the same immediacy as the sense-presentation.

This complex but unanalysed cognition is the germ from which our detailed knowledge of matter develops. To trace this development lies outside my present scope. In dealing with it, we should, in the first place, have to give an account of the distinction of matter into a plurality of distinct things, and of the peculiar nature of that special thing which we call the body of the percipient and its peculiar relation to subjective process,—a relation which leads to the distinction between the self as embodied and its material environment. When this point is reached what follows is, comparatively speaking, an affair of detail.

10. Knowledge of minds other than our own.

In considering the independent self as qualified in terms of sense-experience, and so forming a constituent of matter, we have not exhausted its nature or our knowledge of it. It must also have an inner being of its own, and this inner being is known to us as more

or less analogous to our own We know the independent not-self, in the first instance, as the complement and continuation of our own being Its activity is known as the other side of our passivity, and its passivity as the other side of our activity. Neither its activity nor its passivity have ultimately any meaning for us except as the counterpart of our own immediate experience in doing and undergoing. And whatever knowledge we may attain concerning its inner nature can only be a further development of this primary cognition So far as we have any insight into its inner being we must apprehend it as another self, or as a partial aspect of another self more or less like our own.

But it is only within a certain region of our experience that this mode of determining the nature of the independent not-self yields definitely verifiable results. It is only in dealing with men, and in a less degree with animals, that this anthropomorphic point of view is found to work in verifiable detail, so as to subserve the development of knowledge and the guidance of conduct. In relatively primitive stages of mental life, we find an indiscriminate anthropomorphism which is gradually restricted and corrected by advancing experience of its futility. But anthropomorphism neither is nor ought to be wholly eliminated. For we must continue to think of actual existences other than our own as having an inner being not exhausted in their relation to us and our sense-experience. And such inner being can only be conceived as psychical. Inner states and processes must, as Lotze maintained, be experienced states and processes.

SUMMARY.

THE MOGHUL EMPIRE IN RELATION TO THE MODERN HISTORY OF ASIA

By SIR A. C. LYALL

FELLOW OF THE ACADEMY

Read July 5, 1905.

THE points of connexion between the histories of Europe and Asia, and the reciprocal influence of that connexion upon the course of events in each continent, form an attractive subject of inquiry. The Asiatic conquests of Alexander the Great introduced Hellenic civilization into the Eastern continent. The Roman dominion followed, extending a strong administration over the Asiatic provinces of the empire. But from the seventh century onward the conquests of the Mahomedans drove back and finally expelled European rule and civilization from Asia. Irruptions of two Tartar and Moghul hordes threw the whole Continent into confusion between the thirteenth and fifteenth centuries, until at the end of the fifteenth and the beginning of the sixteenth century powerful kingdoms were consolidated in western Asia, Persia, and India. About the same period the kingdoms of Europe began to settle down into their permanent form of great States, absorbing the minor rulerships and feudatories into strong centralized monarchies.

The subject of the present paper is the rise and fall of the Moghul empire, founded in India by Bábar early in the sixteenth century. After many adventures and varying fortunes Bábar subdued North India, and founded his dynasty. His son, Humayun, was defeated by a usurper, took refuge in Persia, and only regained his throne after long exile. Victorious and brilliant reign of the next emperor, Akbar, who largely extended the dominion. his character and his attempts to impose a new religion. His son Jehangir was succeeded by Shah Jehán, in whose reign the Moghul empire touched its highest point of magnificence and prosperity

But this great and wealthy sovereignty was always vulnerable at its extremities In Afghanistan, the northern province, the unruly mountain tribes were perpetually revolting against the imperial governors, and from beyond Afghanistan the Persians made frequent invasions and territorial encroachments, Kandahar, the chief border

fortress, was taken by them in 1648. The independent kings of South India waged incessant war against the Moghuls, so that on both frontiers, North and South, the empire was insecure and its armies constantly in the field. Toward the end of Shah Jehán's reign the Marathas were gathering strength and establishing themselves in the south-west; they broke out into formidable rebellion against Aurangzeb, Shah Jehán's successor, and their power increased until it gradually disorganized the whole empire. Their origin, methods of warfare, and the spread of their predominance, described. Aurangzeb's character and policy, a bigoted Mahomedan, of great governing ability, and perseverance under difficulties; his military disasters in Afghanistan, his long campaigns against the Marathas for the last twenty-four years of his reign; the exhaustion of his finances and of his armies until he died, surrounded by irrepressible enemies, in his camp in South India, having destroyed, to his own disadvantage, the independent Mahomedan kingdoms. Their destruction expedited the decline and fall of the Moghul empire, for Aurangzeb had seized more than he could hold; he was unable to enforce an unpopular despotism over distant provinces; and thus the expansion of his empire proved fatal to its solidity. After Aurangzeb's death its disorganization rapidly increased, through the multiplication of internal disorder, the triumphant progress of the Maratha confederacy insurrections in Afghanistan, and the invasions from Persia, The closing annals of the Moghul dynasty record short reigns of incapable rulers, distracted by tumults, seditions, and conspiracies. Nadir Shah broke into India from Persia, seized and pillaged Delhi, the capital; and rent away from the empire all its provinces west of the Indus, so that the western frontier of India was left open and defenceless. After Nadir Shah's death Ahmed Khan, an Afghan chief, occupied the Punjab, and defeated the Marathas near Delhi in a great battle, but retired into Afghanistan. The contest for empire in India now lay between the Marathas and the English. Rise of the Sikh kingdom in the Punjab at the close of the eighteenth century. Early in the nineteenth century the English occupy Delhi, expelling the Marathas. General survey of the course and constitution of the Moghul empire; its inherent defects and weakness, the character of its administration, the causes and circumstances, internal and external, that brought about its decline and disruption. The rise of the British power was the direct consequence of that empire's fall in the eighteenth century—an epoch of singular historical importance, because it marks the revival and restoration, after many centuries, of a great European dominion in Asia.

THE ROMANIZATION OF ROMAN BRITAIN

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Read Nov. 29, 1905

Historians rarely praise the Roman Empire. They regard it as a period of death and despotism, from which political freedom and creative genius and the energies of the speculative intellect were all alike excluded. There is, unquestionably, much truth in this judgement. Yet perhaps there is another side to be considered. The world of the Empire was indeed, as Mommsen has called it, an old world. Behind it lay the dreams and experiments, the self-convicted follies and disillusioned wisdom of many centuries. Before it lay no untravelled region such as revealed itself to our forefathers at the Renaissance or to our fathers fifty years ago. No new continent then rose up beyond the western seas. No forgotten literature suddenly flashed out its long-lost splendours. No vast discoveries of science transformed the universe and the interpretation of it The inventive freshness and intellectual confidence that are born of such things were denied to the Empire. Its temperament was neither artistic, nor literary, nor scientific. It was merely practical.

Yet if practical, it was not therefore uncreative. In its own sphere of everyday life, it was an epoch of growth in many directions Even the arts moved forward. Sculpture was enriched by a new and nobler style of portraiture. The scope of architecture was widened by the engineering genius which reared the aqueduct of Segovia and the Basilica of Maxentius [1]. But these are only practical expansions of arts that are in themselves unpractical. The greatest work of the imperial age must be sought in its provincial administration—in the organization of the frontier defences which repulsed the barbarian, and in the development of the provinces within those defences. The first of these achievements was but for a time. In the end the

[1] Franz Wickhoff, *Wiener Genesis*, p. 10, Riegl, *Stilfragen*, p. 272.

Roman legionary went down before the Gothic horseman. But before he fell he had done his work. In the lands that he had sheltered, Roman civilization had taken firm root. The growth of Roman speech and manners, the extension of the political franchise, the establishment of city life, the assimilation of the provincial populations in an orderly and coherent civilization, had been accomplished. That was the work of the Empire. As the importance of the city of Rome declined, as the world became Romeless, a large part of the world became Roman.

This Romanization has its limits and its characteristics. First, in respect of place. Alike in the further east, where (as in Egypt) mankind was non-European, and in the nearer east, where a Greek civilization reigned, the effect of Romanization was inevitably partial. A few Italian oases were created here and there in Asia Minor and in Syria. But all of them, save one or two, perished like exotic plants [1]. The Romanization of these lands was political. Their inhabitants learnt to call and to consider themselves Romans. But they did not adopt the Roman language or Roman civilization. The west offers a different spectacle. Here Rome found races that were not yet civilized, yet were racially capable of accepting her culture. Here, accordingly, her conquests differed from the two forms of conquest with which modern men are most familiar. We know well enough the rule of civilized white men over uncivilized Africans or Asiatics who seem sundered for ever from their conquerors by a broad physical distinction. We know too the rule of civilized white men over civilized white men—of Russian (for example) over Pole, where the individualities of two similarly civilized races clash in undying conflict. The Roman conquest of western Europe resembled neither of these. Celt, Iberian, German, Illyrian were marked off from Italian by no broad distinction of race and colour, such as that which marked off Egyptian from Italian, or that which now divides Englishman from Indian or Frenchman from Algerian Arab. They were marked off, further, by no ancient culture, such as that which had existed for centuries round the Aegean. It was possible, it was easy, to Romanize these western peoples.

Even their geographical position helped, though somewhat in-

[1] See Mitteis, *Reichsrecht und Volksrecht*, p. 147, and Kubitschek, *Festheft Bormann* (Wiener Studien, xxiv 2), pp 340–349 One reason for the loss of Roman culture is indicated by inscriptions like C. iii 6800, in which a veteran of the Legio xii Fulminata, M Antonius Longus, commemorates a wife with the purely native name of Ba. This is perhaps to be distinguished from the marriages of soldiers on service with *peregrinae*, from which the well-known class of *castrenses* sprang (*Ephemeris Epigr.*, v 14)

directly, to further the process. Tacitus two or three times observes that the western provinces of the Empire looked out on no other land to the westward and bordered on no free nations. That is one half of a larger fact which influenced the whole history of the Empire. In the west lay the sea and the Sahara. In the east were wide lands and powerful states and military dangers and political problems and commercial opportunities. The Empire arose in the west and in a land that, geographically speaking, looks westward. But it was drawn surely, if slowly, to the east. Throughout the first three centuries of our era, we can trace an eastward drift—of troops, of officials, of government machinery—till finally the capital itself is no longer Rome but Byzantium. All the while, in the undisturbed security of the west, Romanization proceeded steadily.

The advance of this Romanization followed manifold lines. In various ways the Roman government gave direct encouragement. It increased the Roman or Romanized population of the provinces by establishing time-expired soldiers—men who spoke Latin and were citizens of Rome[1]—in provincial municipalities. It allured provincials themselves to adopt Roman civilization by granting the franchise and other privileges to those who conformed. Neither step need be ascribed to any idealism on the part of the rulers. *Coloniae* were centres of repression as well as of culture. Civilized men were more easily ruled than savages[2]. But the result was in any case the same.

No less important results followed from unofficial causes. The legionary fortresses collected settlers—traders, women, veterans—under the shelter of their ramparts, and their *canabae* or 'bazaars,' to use an Anglo-Indian term, formed centres of Roman speech and life, and often developed into cities. Italians, especially of the upper-middle class, merchants and others, emigrated freely and formed little Roman settlements, often in districts where no troops were

[1] English writers sometimes adduce the provincial origins of the soldiers as proofs that they were unromanized. But the conclusion is unjustifiable. The legionaries were throughout recruited from places which were adequately romanized. The auxiliaries, though recruited from less civilized districts, and though to some extent tribally organized in the early Empire, were denationalized after A. D. 70, and non-Roman elements do not begin to recur in the army till much later. Even Tiberius *militem Graece testimonium interrogatum nisi Latine respondere vetuit* (Suet. *Tib.* 71).

[2] Tac. *Agr.* 21 *ut homines dispersi ac rudes, eoque in bella faciles, quieti et otio per voluptates adsuescerent, hortari privatim adiuvare publice ut templa fora domos exstruerent. ... Idque apud imperitos humanitas vocabatur, cum pars servitutis esset.* Tacitus frequently emphasizes this point.

stationed [1]. Chances opened at Rome for able provincials who became Romanized. Above all, the definite and coherent civilization of Italy took hold of uncivilized but intelligent men, while the tolerance of Rome, which coerced no one into conformity, made its culture the more attractive because it was the less inevitable.

This process of Romanization is hard to follow in detail, since datable evidence is scanty. In general, however, the instances of really native fashions or speech which are recorded from this or that province, belong to the early Empire. To that age we must assign the Celtic, Iberian, and Punic inscriptions which we find occasionally in Gaul, Spain, and Africa, and the native titles like vergobret or suffete, and the retention of native personal names and of that class of Latin *nomina*, like Lovessius, which are formed out of native names. In the later Empire such things are rare. A few examples naturally meet us here and there. Punic-speaking clergy, it appears, were needed in some of the remoter villages of fourth-century Africa. But these are survivals, noted at the time as exceptional, and explained by their remoteness from the great centres of civilization. In most districts the Latin tongue obviously prevailed. In material culture the Romanization advanced no less quickly. One uniform fashion spread from Italy throughout central and western Europe, driving out native art and substituting a conventionalized copy of Italian art, which is characterized alike by its technical finish and neatness, and by its lack of originality and its servile dependence on imitation. The result was inevitable. The whole external side of life was lived amidst Italian, or (as we may perhaps call it) Roman provincial, furniture and environment. Politically, again, the provincial soon realized himself to be a Roman. If he felt sometimes the claims of his province and raised a cry that sounds like 'Africa for the Africans,' he acted on a geographical, not on any native or national idea. He was demanding individual life for a Roman section of the Empire. He was anticipating, perhaps, the birth of new nations out of the Romanized populations. He was not attempting to recall the old pre-Roman system. Similarly, if his art or architecture embodies native fashions or displays a local style, if special types of houses or of tombstones or sculpture occur in

[1] Schulten, *de conventibus civium Romanorum*; Kornemann, *de civibus Rom. in prov. imperii consistentibus*. A good example is indicated by an inscription of Avaricum Biturigum (Bourges) in Aquitania (C. XIII (I) 1, no. 1194) *pro salute Caesarum et p. R., Minervae et divae Drusillae sacrum in perpetuum, C. Agileius Primus vi vir Aug. c(urator) c(ivium) R(omanorum), d. s. p. d.* (A. D. 38-40). The fact that a freedman was 'curator' does not imply that the body of Roman citizens at Bourges were not freeborn.

special districts, that does not mar the result. These are not efforts to regain an earlier native life. They are not the enemies of Roman culture, but its children—sometimes, indeed, its adopted children—and signify the commencement of new Roman styles of fashions.

But while it is true generally that Romanization spread rapidly, we must admit great differences between different districts. Some grew Romanized soon and thoroughly, others slowly and imperfectly. Gallia Comata, that is, Gaul north and west of the Cevennes, contrasted sharply in this respect with Narbonensis, the province of the Mediterranean coast and the Rhone valley. This latter, even in the first century A.D., had become *Italia verius quam provincia*. The other lagged behind. In the Pyreneean valleys Basque must have been spoken throughout the Roman period. Among the Treveri near the eastern frontier, Celtic could be heard in the fourth century—presumably in the great woodlands that overhang the Mosel valley. Yet even in northern Gaul Romanization strode forward. The Gaulish monarchy of A.D. 258–273 shows us the position north of the Cevennes just after the middle of the third century. In it Roman and native elements were mixed. Its emperors were called not only Latinius Postumus but also Piavonius and Esuvius Tetricus. Its coins were inscribed not only 'Romae Aeternae,' but also 'Herculi Deusoniensi' and 'Herculi Magusano'. It not only claimed independence of Rome or perhaps equality with it, but it aspired to be the Empire. It had its own senate, copied from that of Rome, its *tribunicia potestas* conferred on its ruler and its title *princeps iuventutis* for the heir apparent. At that date it was still possible for a Gaulish ruler to bear a Gaulish name and to appeal to some sort of native memories. But the appeal was made without any sense that it was incompatible with a general acceptance of Roman fashions, language, and constitution. Postumus, if he had had the chance, would have made himself Emperor of Rome. Though the native element in Gaul had not died out of mind, at any rate its opposition to the Roman had become forgotten. It had become little more than a picturesque and interesting contrast to the all-absorbing Roman element. A hundred and thirty years later it had almost wholly vanished[1].

[1] Not impossibly, however, the ultimate extinction of Celtic in the north-east of Gaul may be due to the inrush of Teutons and the Teutonic language. Mommsen (*Röm. Gesch.* v. 92) ascribes it rather to the influence of Christianity 'welche in Gallien nicht, wie in Syrien und Aegypten, die von der Regierung bei Seite geschobene Landessprache aufnahm, sondern das Evangelium lateinisch verkündigte.' But the Latin Church seems to have been ready to use the native idioms where necessary (p. 4). Its later tendency to insist on Latin arose rather from the wide diffusion of Latin through the western provinces.

Such is the historical situation to which we must adjust our views of any single province in the western Empire. Two main conclusions may here be emphasized. First, Romanization in general extinguished the distinction between Roman and provincial, alike in politics, in material culture and in language. Secondly, it did not everywhere and at once destroy all traces of tribal or national sentiments or fashions. These remained, at least for a while and in a few districts, not so much in active opposition as in latent persistence, capable of resurrection under the proper conditions. In such cases the provincial had become a Roman. But he could still undergo an atavistic reversion to the ancient ways of his forefathers.

One western province seems to form an exception to the general rule. In Britain, as it is described by the majority of English writers, we have a province in which Roman and native were as distinct as modern Englishmen and Indian, and 'the departure of the Romans' in the fifth century left the Britons almost as Celtic as their coming had found them. The adoption of this view may be set down, I think, to various reasons which have, in themselves, little to do with the subject. The older archaeologists, familiar with the early wars narrated by Caesar and Tacitus, pictured the whole history of the island as consisting of such struggles. Later writers have been influenced by the analogies of English rule in India. Still more recently, the revival of Welsh national sentiment has inspired a hope, which has become a belief, that the Roman conquest was an episode, after which an unaltered Celticism resumed its interrupted supremacy. These considerations have, plainly enough, very little value as history, and the view which is based on them seems to me mistaken. As I have already pointed out, it is not the view which is suggested by a consideration of the general character of the western provinces. Nor do I think that it is the view which agrees best with the special evidence which we possess in respect of Britain. In the following paragraphs I propose to examine this evidence. I shall adopt an archaeological rather than a legal or a philological standpoint. The legal and philological arguments have often been put forward. But the legal arguments are entirely *a priori*, and they have led different scholars to very different conclusions. The philological arguments are no less beset with difficulties. Both the facts and their significance are obscure, and the inquiry into them has hitherto yielded little beyond confident and yet wholly contradictory assertions and theories which are not susceptible of proof. The archaeological evidence, on the other hand, is definite and consistent, and perhaps deserves fuller notice than it has yet received.

I need not here insert a sketch of Roman Britain. But I may call attention to three features which are not seldom overlooked.
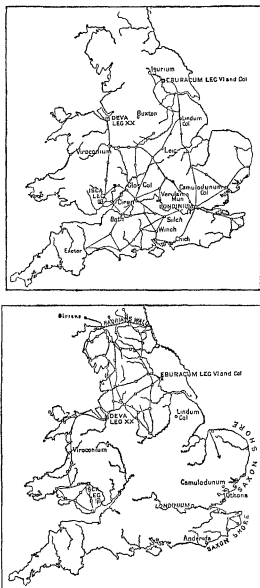
FIG. 1. THE CIVIL AND MILITARY DISTRICTS OF BRITAIN.

In the first place, it is necessary to distinguish the two halves of the province, the one the northern and western uplands occupied only

by troops, and the other the eastern and southern lowlands which contained nothing but purely civilian life[1]. The two are marked off, not in law but in practical fact, almost as fully as if one had been *domi* and the other *militiae*. We shall not seek for traces of Romanization in the military area. There neither towns existed nor villas. Northwards, no town or country house has been found beyond the neighbourhood of Aldborough (Isurium), some fifteen miles north-west of York. Westwards, on the Welsh frontier, the most advanced town was at Wroxeter (Viroconium), near Shrewsbury, and the furthest country house was an isolated dwelling at Llantwit, in Glamorgan. In the south-west, the last house was near Lyme Regis, the last town at Exeter. These are the limits of the Romanized area. Outside of them, the population cannot have acquired much Roman character, nor can it—except perhaps in Devon and Cornwall—have been numerous enough to form more than a subsidiary factor in our problem[2]. But within these limits were towns and villages and country houses and farms, a large population and a developed and orderly life.

Secondly, Romano-British life was on a small scale. It was, I think, normal in quality and indeed not very dissimilar from that of many parts of Gaul. But it was in any case defective in quantity. We find towns in Britain, as elsewhere, and farms or country houses. But the towns are small and somewhat few, and the country houses indicate comfort more often than wealth. The costlier objects of ordinary use, fine mosaics, precious glass, gold and silver ornaments, occur comparatively seldom[3]. We have before us a civilization which,

[1] For further details see the Victoria County Histories of *Northamptonshire*, i 159, and *Derbyshire*, i 191. To save frequent references to the same works, I may say here that much of the evidence for the following paragraphs is to be found in my articles on Romano-British remains printed in the volumes of this History. I am indebted to its publishers for leave to reproduce several illustrations from its pages. For many others I may refer my readers to the History itself.

[2] The Roman remains discovered west of Exeter are few and mostly later than A.D. 250. No town or country house or farm or stretch of roadway has ever been found here. The list includes only an early settlement on Plymouth harbour, another near Bodmin, of small size, and a third, equally small and of uncertain date, on Padstow harbour; some scanty vestiges of tin mining, principally late; two milestones (if milestones they be) of the early fourth century, the one at Tintagel church and the other near St Hilary; and some scattered hoards and isolated bits. Portions of the country were plainly inhabited, but the inhabitants did not learn Roman ways, like those who lived east of the Exe. Even tin mining was not pursued very actively till a comparatively late period.

[3] See my remarks in Traill's *Social England* (illustrated edition, 1901), i 141-161.

like a man whose constitution is sound rather than strong, might perish quickly before a violent shock.

And lastly, the distribution of civilian life, even in the lowlands, was singularly uneven. It is not merely that some districts were the special homes of wealthier residents. We have also to conceive of some parts as densely peopled and of some as hardly inhabited. Portions of Kent, Sussex, and Somerset are set thick with country houses and similar vestiges of Romano-British life. But other portions of the same counties, southern Kent, northern Sussex, western Somerset, show very few traces of any settled life at all. The midland plain, and in particular Warwickshire [1], seems to have been the largest of these 'thin spots.' Here, among great woodlands and on damp and chilly clay, there dwelt not merely few civilized Roman-Britons, but few occupants of any sort.

We may now proceed to survey the actual remains. They may seem scanty, but they deserve examination.

First, in respect of language. Even before the Claudian conquest of A.D. 43, British princes had begun to inscribe their coins with Latin words. These legends are not merely blind and unintelligent copies, like the imitations of Roman legends on the early English *sceattas*. The word most often used, REX, is quite strange to the Roman coinage, and must have been employed with a real sense of its meaning. After A.D. 43, Latin advanced rapidly. No Celtic inscription occurs, I believe, on any monument of the Roman period in Britain, neither cut on stone nor scratched on tile or potsherd, and this fact is the more noteworthy because Celtic inscriptions are not at all unknown in Gaul. On the other hand, Roman inscriptions occur freely in Britain. They are less common than in many other provinces, and they abound most in the military region. But they appear also in towns and country houses, and some of the instances are significant.

The best town site that we can examine is Calleva or Silchester, ten miles south of Reading, which has been excavated with much care and thoroughness. Here a few fairly complete inscriptions on stone have been discovered, and many fragments of others, which prove that the public language of the town was Latin [2]. The

[1] *Victoria Hist. of Warwickshire*, i. 228.

[2] For these and for the following *graffiti* see my account in the *Victoria History of Hampshire*, i. 275, 280–284. For the 'Clementinus' tile (discovered since) see *Archaeologia*, lviii. 30. It should be noted that Silchester lies in a stoneless country, so that stone inscriptions would naturally be few and would easily be used up for later building. Moreover, its cemeteries have not yet been explored, and only one tombstone has come accidentally to light.

speech of ordinary conversation is equally well attested by smaller inscribed objects, and the evidence is remarkable, since it plainly refers to the lower class of Callevans. When a weary brick-maker scrawls SATIS with his finger on a tile, or some prouder spirit writes CLEMENTINVS FECIT TVBVM (Clementinus made this box-tile), when a bit of Samian is marked FVR—presumably as a warning from the servants of one house to those of the next—or a rude brick shows the word PVELLAM—probably part of an amatory sentence, otherwise lost—we may be sure that the lower classes of Calleva used Latin alike at their work and in their more frivolous moments (figs. 2, 3, 4).

It has been asked, indeed, how a British workman could have learnt Latin, and it has been suggested that these *graffiti* were written by immigrant Italians, working as labourers or servants in Calleva. The question does not touch the real issue. Our general survey of the western provinces indicated that Romanization occurred freely in them, and, if it came about in Britain, the workman would learn Latin as a matter of course with the rest of the country. The proper question to be asked is whether evidence exists to show that Britain was Romanized, and Latin words scratched by servants on tiles or potsherds seem to supply some of that evidence. The suggestion that these servants were Italians does not seem probable. Italians certainly emigrated to the provinces in considerable numbers, just as Italians emigrate to-day. But the ancient emigrants were not labourers, as they are to-day. They were traders or dealers in land, or money-lenders or other 'well-to-do' persons. The labourers and servants of Calleva must be sought among the native population, and the *graffiti* testify that this population wrote Latin.

It is a further question whether, besides writing Latin, the Callevan servants and workmen may not also have spoken Celtic. Here direct evidence fails. In the nature of things, we cannot hope for proof of the negative proposition that Celtic was not spoken in Silchester. But all probabilities suggest that it was, at any rate, spoken very little. In the ten years excavation of the site, no Celtic inscription has emerged. Instead, we have proof that the lower classes wrote Latin for all sorts of purposes. Had they known Celtic well, it is hardly credible that they should not have sometimes written in that language as the Gauls did across the Channel. A Gaulish potter of Roman date could scrawl his name and record, *Sacrillos avot*, 'Sacrillus made this,' on the outside of a mould for casting little earthenware figurines. No such scrawl has ever been found in Britain[1]. The Gauls, again, could invent a special letter Ð

[1] Tudot, *Bulletin monumental*, xxiii. (1857) 367 One example is *Sacrillos avot*

FIG. 2

FIG. 3
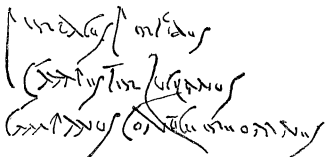
FIG. 4

GRAFFITI FROM SILCHESTER

FIG. 2 PUELLAM FIG. 3 CLEMENTINUS FECIT TUBUM

FIG. 4 PERTACUS PERFIDUS CAMPESTER LUCILIANUS CAMPANUS CONTICUERE OMNES (PROBABLY A WRITING LESSON)

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to denote a special Celtic sound and keep it in Roman times. No such letter was used in Roman Britain. Mr Hogarth has, indeed, cited to me the case of towns like Lystra in Asia Minor, where, as St. Paul found, the inhabitants spoke their native Lycaonian, but where no Lycaonian inscription has ever been discovered. The parallel is, however, not satisfactory. Until Lystra has been explored in the manner of Silchester, it seems too early to say that its Lycaonian speech has left no written traces.

No other Romano-British town has been excavated so extensively or so scientifically as Silchester. None, therefore, has yielded so much evidence. But we have no reason to consider Silchester exceptional in its character. Such scraps as we possess from other sites point to similar Romanization elsewhere. FVR, for instance, recurs in the Romano-British country town at Dorchester in Dorset, and all the *graffiti* on potsherds or tiles that are known to me as found in towns or country houses, are equally Roman. Larger inscriptions, cut on stone, have also been found even in country houses. On the whole the general result is clear. Latin was employed freely in the towns of Britain, not only on serious occasions or by the upper classes, but by servants and work-people for the most accidental purposes. It was also used, at least by the upper classes, in the country. Plainly there did not exist in the towns that linguistic gulf between upper class and lower class which can be seen to-day in many cities of eastern Europe, where the employers speak one language and the employed another. On the other hand, it is possible that a different division existed, one which is perhaps in general rarer, but which can, or could, be paralleled in some Slavonic districts of Austria-Hungary. That is, the townsfolk of all ranks and the upper class in the country may have spoken Latin, while the peasantry may have used Celtic. No evidence has been discovered to prove this. We may, however, suggest that it is not, in itself, an impossible or even an improbable linguistic division of Roman Britain.

It remains to cite the literary evidence, distinct if not abundant, as to the employment of Latin in Britain. Agricola, as is well known, encouraged the use of it, with the result (says Tacitus) that the Britons, who had hitherto hated and refused the foreign tongue, became eager to speak it fluently. Forty years later, Juvenal alludes casually to British lawyers taught by Gaulish schoolmasters, and

form., suggesting a bilingual sentence such as we find in some Cornish documents of the period when Cornish was definitely giving way to English. Another example, *Valens avoti* (Déchelette, *Vases céramiques*, i. 302), suggests the same stage of development in a different way

Plutarch in his tract on the cessation of oracles mentions one Demetrius of Tarsus, grammarian, who had been teaching in Britain, and mentions him as nothing at all out of the ordinary course. It is plain that by the second century Latin must have been spreading widely in the province. We need not feel puzzled about the way in which the Callevan workman of perhaps the third or fourth century learnt his Latin.

At this point we might wish to introduce the arguments deducible from philology. We might ask whether the phonetics or the vocabulary of the later Celtic and English languages reveal any traces of the influence of Latin, as a spoken tongue, or give negative testimony to its absence. Unfortunately, the inquiry seems almost hopeless. The facts are obscure and open to dispute, and the conclusions to be drawn from them are quite uncertain. Dogmatic assertions proceeding from this or that philologist are common enough. Trustworthy results are correspondingly scarce. One instance may be cited in illustration. It has been argued that the name 'Kent' is derived from the Celtic 'Cantion,' and not from the Latin 'Cantium,' because, according to the rules of Vulgar Latin, 'Cantium' would have been pronounced 'Cantsium' in the fifth century, when the Saxons may be supposed to have learnt the name. That is, Celtic was spoken in Kent about 450. Yet it is doubtful whether Latin 'ti' had really come to be pronounced 'tsi' in Britain so early as A. D 450. And it is plainly possible that the Saxons may have learnt the name long years before the reputed date of Hengist and Horsa. The Kentish coast was armed against them and the organization of the 'Saxon Shore' established about A. D. 300. Their knowledge of the place-name may be at least as old. No other difficulty seems to hinder the derivation of 'Kent' from the form 'Cantium,' and the whole argument based on the name thus collapses. It is impossible here to go through the whole list of cases which have been supposed to be parallel in their origin to 'Kent,' nor should I, with a scanty knowledge of the subject, be justified in such an attempt. I have selected this particular example because it has been emphasized by a recent writer[1]. I prefer to pass on to better ascertained facts.

From language we pass to material civilization. Here is a far wider field of evidence, provided by buildings private or public, their equipment and furniture, and the arts and small artistic or decorative objects. On the whole this evidence is clear and consistent. The material civilization of the province, the external fabric of its life,

[1] Vinogradoff, *Growth of the Manor*, p. 102. I am indebted to Mr. W. H. Stevenson in relation to these philological points.
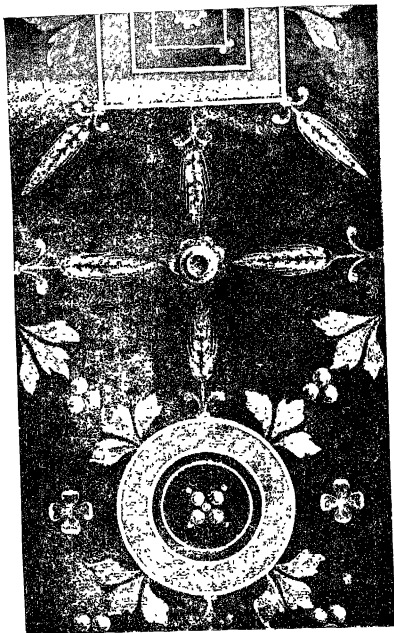
Fig. 5 Restoration of painted pattern on wall plaster at Silchester showing a purely conventional style based on classical models (*From Archaeologia*)

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was Roman, and the native elements almost wholly succumbed to the foreign conquering influence. In respect to public buildings this is natural. Before the Claudian conquest the Britons can hardly have possessed large structures in stone, and their provision necessarily came from Rome. The *fora*, basilicas, and temples which have been discovered at Silchester and elsewhere, follow Roman models and resemble similar buildings in other provinces. The characteristics of the private houses are more complicated. In their ground plans we meet types which recur in northern Gaul, but which differ essentially from the house-types of Italy or of the Mediterranean provinces of the Empire. The houses of Italy and of the south generally looked inwards upon open *impluvia*, colonnaded courts and garden plots. They had few outer windows and fitted easily together in the streets of a town. The houses of Britain and Gaul looked outwards on the surrounding country. Their rooms were generally arranged in rows along corridors or cloisters, they frequently enclosed three sides of a large open yard and were singularly ill-suited to juxtaposition in the streets of a town. We may suppose them to be Roman modifications of some Celtic originals. But this no more implies that their occupants were Celts than the use of a bungalow in India proves the inhabitant an Indian.

The point is made clearer by the character of the internal fittings, for these are wholly borrowed from Italian sources. If we cannot find in the Romano-British house either *atrium* or *impluvium*, *tablinum* or peristyle, such as we find regularly in Italy, we have none the less the painted wall-plaster (fig. 5) and mosaic floors, the hypocausts and bath-rooms of Italy. The wall-paintings and mosaics may be poorer in Britain, the hypocausts more numerous, but the things themselves are those of the south. No mosaic, I believe, has ever come to light in the whole of Roman Britain which represents any local subject or contains any unclassical feature. The usual ornamentation consists either of mythological scenes, such as Orpheus charming the animals, or Apollo chasing Daphne, or Actaeon rent by his hounds, or of geometrical devices like the so-called Asiatic shields, which are purely of classical origin [1]. Perhaps we

[1] It has been suggested that these mosaics were principally laid by itinerant Italians. The idea is, of course, due to modern analogies. But it does not seem quite impossible, since the work is in a sense that of an artist, and the pay might be high enough to attract stray decorators of good standing from the Continent. However, no evidence exists to prove this or even to make it probable. The mosaics of Roman Britain, with hardly an exception, are such as might easily be made in a province which was capable of exporting skilled workmen to Gaul (p. 25). They have also the appearance of imitative work copied from

may detect in Britain a special fondness for the cable or guilloche pattern, and we may conjecture that from Romano-British mosaics it passed in a modified form into later Celtic art. But the ornament itself, whether in single border or in many-stranded panels of plait work, occurs not rarely in Italy as well as in thoroughly Romanized lands like southern Spain and southern Gaul and Africa [1].

Nor is the Roman fashion of house-fittings confined to the mansions of the wealthy. Hypocausts and painted stucco, copied, though crudely, from Roman originals, have been discovered in poor houses and in mean villages [2]. They formed part, even there, of the ordinary environment of life. They were not, as an eminent writer [3] calls them, 'a delicate exotic varnish.' Indeed, I cannot recognize in our Romano-British remains the contrast alleged by this writer 'between an exotic culture of a higher order and a vernacular culture of a primitive kind.' There were in Britain splendid houses and poor ones. But a continuous gradation of all sorts of houses and all degrees of comfort connects them, and there is no discernible breach in the scale. Throughout, the dominant element is the Roman provincial fashion which is borrowed from Italy.

Art shows a rather different picture. Here we reach definite survivals of Celtic traditions. There flourished in Britain before the Claudian conquest a vigorous native art, chiefly working in metal and enamel, and characterized by its love for spiral devices and its fantastic use of animal forms. This art—La Tène or Late Celtic or whatever it be styled—was common to all the Celtic area of Europe just before the Christian era, but its vestiges are particularly clear in Britain. When the Romans spread their dominion over the island it almost wholly vanished. For that we are not to blame any evil influence of the Empire. All native arts, however beautiful,

patterns rather than of designs sketched by artists. It is most natural to suppose that, like the Gaulish Samian ware—which is imitative in just the same fashion—they are local products.

[1] See, for example, the Wollaston Collection of Drawings of Mosaics (in the South Kensington Museum), where examples occur from Rome, Ostia, Pompeii, Carthage, Algeria, and Asia Minor. Compare also *Commission d'Archéologie d'Aix* (Aix en Provence, 1844), plate 2 (enclos Milhaud); A Laborde, *Description d'un pavé en mosaïque découvert dans l'ancienne ville d'Italica* (Paris, 1802), &c. See p. 211, note.

[2] R. C. Hoare, *Ancient Wilts, Roman Aera*, p. 127: 'On some of the highest of our downs I have found stuccoed and painted walls, as well as hypocausts, introduced into the rude settlements of the Britons.' This is fully borne out by Gen. Pitt-Rivers' discoveries near Rushmore, to be mentioned below. Similar rude hypocausts were opened some years ago in my presence at Eastbourne.

[3] Vinogradoff, *Growth of the Manor*, p. 39.

FIG 6 LATE-CELTIC METAL WORK, NOW IN THE BRITISH MUSEUM

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tend to disappear before the more even technique and the neater finish of town manufactures. The process is merely part of the honour which a coherent civilization enjoys in the eyes of the country folk. Disraeli somewhere describes a Syrian lady preferring the French polish of a western boot to the jewels of an eastern slipper. With a similar preference the British Celt abandoned his national art and adopted the Roman provincial fashion.

He did not abandon it entirely. Little local manufactures of pottery or fibulae testify to its sporadic survival. Such are the
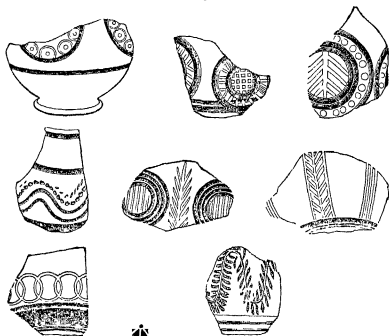
FIG 7 FRAGMENTS OF NEW FOREST POTTERY WITH LEAF PATTERNS (*From Archaeologia*).

brooches with Celtic affinities made (as it seems) near Brough (Verterae) in Westmorland, and the New Forest urns with their curious leaf ornamentation, and above all the Castor ware from the banks of the Nen, five miles west of Peterborough. We may briefly examine this last instance [1]. At Castor and Chesterton, on the north and south sides of the river, were two straggling Romano-British settlements of

[1] *Victoria Hist. of Northamptonshire*, i. 206–213; Artis, *Durobrivae of Antoninus* (fol. 1828) For the New Forest ware see the *Victoria Hist of Hampshire*, i 326, and *Archaeol. Journal*, xxx. 319. The Brough brooches have been pointed out by Mr A. J. Evans, whose work on Late Celtic Art is the foundation of all that has since been written on it, but have not been discussed in detail.

comfortable houses, furnished in genuine Roman style. Round them were extensive pottery works. The ware, or at least the most characteristic of the wares, made in these works is generally known as Castor or Durobrivian ware. Castor was not, indeed, its only place of manufacture It was produced freely in northern Gaul, and possibly elsewhere in Britain[1]. But Castor is the best known and best attested manufacturing centre, and the easiest for us to examine. The ware directly embodies the Celtic tradition. It has indeed its classical elements, foliated scrolls, hunting scenes, and occasionally mythological
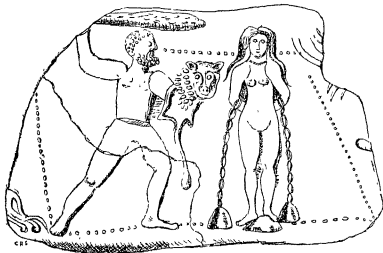
FIG. 8. HERCULES RESCUING HESIONE. *From a piece of Castor ware found in Northamptonshire* (C. R. Smith, *Coll. Ant.* vol iv, plate XXIV)

representations (figs. 8–10). But it recasts many of these elements with the vigour of a true art and in accordance with its special tendencies. Those fantastic animals with strange outstretched legs and backturned heads and eager eyes; those tiny scrolls scattered by way of decoration above or below them; the rude beading which serves, not ineffectively, for ornament or for dividing line, the suggestion of returning spirals, the evident delight of the artist in plant and animal forms and his neglect of the human figure—all these are Celtic. When we turn to the rarer

[1] For the Belgic 'Castor ware' see de Bast, *Antiquités romaines trouvées dans la Flandre* (Gand, 1808), plates x, xi; H. du Cleuziou, *Poterie gauloise* (Paris, 1872), fig. 173, from Cologne, *Sammlung vom Altert. von C. Niessen* (Koln, 1895), p. 30, nos. 574–86, Brongniart, *Traité des arts céram.*, pl. xxix (Ghent and Rheinzabern). M Salomon Reinach tells me that the ware is not infrequent in the departments of the valleys of the Seine, Marne, and Oise. The Colchester gladiator's urn mentioning the thirtieth legion (C. R. Smith, *Coll Ant.*, iv. 82, C. vii. 1335, 3) may well be of Rhenish manufacture.
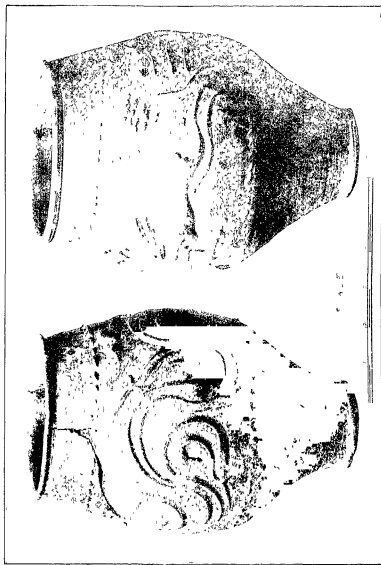
Fig 9 Urns from Castor Northamptonshire, now in Peterborough Museum

FIG 10 TWO HUNTING SCENES FROM CASTOR WARE (ARTIS DUROBRIVAE)

To face p 200]

scenes in which man is specially prominent—a hunt, or a gladiatorial show, or Hesione fettered to a rock and Hercules saving her from the monster[1]—the vigour fails. The artist could not or would not cope with the human form. His nude figures, Hesione and Hercules, and his clothed gladiators are not fantastic but grotesque. They retain traces of Celtic treatment, as in Hesione's hair (fig 8). But the general treatment is Roman. The Late Celtic art is here sinking into the general conventionalism of the Roman provinces.

A second instance may be cited, this time from sculpture, of important British work which is Celtic, or at least un-Roman (fig. 11). The Spa at Bath (Aquae Sulis) contained a temple to Sul or Sulis Minerva, goddess of the waters. The pediment of this temple, partly preserved by a lucky accident, was carved with a trophy of arms—in the centre a round wreathed shield upheld by two Victories, and below and on either side a helmet, standard (?), and cuirass. It is a classical group, such as occurs on other Roman reliefs. But its treatment breaks clean away from the classical. The sculptor placed on the shield a Gorgon's head, as suits alike Minerva and a shield. But he gave to the Gorgon a beard and moustache, almost in the manner of a head of Fear, and he wrought its features with a fierce virile vigour that finds no kin in Greek or Roman art. I need not here discuss the reasons which may have led him to add the male attributes to a female type. For our present purpose the handling of the subject is more noteworthy than its details. It is proof that, once at least, the supremacy of the dominant conventional art of the Empire could be rudely broken down.

Exceptions are always more interesting than rules—even in grammar. But the exceptions pass and the rules remain. The Castor ware and the Gorgon's head are exceptions. The rule stands that the material civilization of Britain was Roman Except the Gorgon, almost every worked or sculptured stone at Bath follows the classical conventions. Except the Castor and New Forest pottery, almost all the better earthenware in use in Britain obeys the same law. The kind that was most generally employed for all but the meaner purposes, was not Castor but Samian or *terra sigillata*[2] This ware is singularly

[1] This, or the corresponding scene of Perseus and Andromeda, is a favourite with artists in northern Gaul and Britain It occurs on tombstones at Chester (*Grosvenor Museum Catalogue*, No 138) and Trier (Hettner, *Die röm Steindenkmäler zu Trier*, p 206), and Arlon (Wiltheim, *Luciliburgensia*, plate 57), and the Igel monument For other instances see Roscher's *Lexikon Mythol*, under Hesione

[2] I may record here a protest against the attempts made from time to time to dispossess the term 'Samian.' Nothing better has been suggested in its stead, and the word itself has the merit of perfect lucidity. It has, of course, nothing

characteristic of Roman provincial art. At its best it is handsome enough. But it is copied almost wholesale from the red Arretine of Etruria. It is purely imitative and conventional, and its details, as often happens in a conventional art, are often little better than a jumble of decorations that do not fit into any coherent story or sequence. In subject and design it is purely classical. Both its geometrical ornament and its figured panels are drawn from Italian sources, and Late Celtic influences are very seldom if ever apparent. This is the ordinary good pottery that was used throughout the western Empire, and indeed in Italy itself, just as in Britain. Its universal occurrence illustrates well enough the whole character of Roman provincial civilization.

The contrast between this civilization and the native culture that preceded it in Britain can readily be seen if we compare for a moment a Celtic village and a Romano-British village. Examples of each have been excavated in the south-west of England, hardly thirty miles apart. The Celtic village is close to Glastonbury in Somerset. Of itself it is a small, poor place—just a group of pile dwellings rising out of a marsh, or (as it may then have been) a lake, and dating from the two centuries immediately preceding the Christian era[1]. Poor as it was, its art is clearly marked. There one recognizes all that delight in decoration and that genuine artistic instinct which mark Late Celtic art, while the details of the objects reveal clearly enough, by their use of the returning spiral, their affinity with the same native fashion. On the other hand, no trace of classical workmanship or design intrudes. There has not been found anywhere in the village even a *fibula* with a hinge instead of a spring, or an Italian (as opposed to a Late Celtic) pattern. Turn now to the Romano-British villages excavated by General Pitt-Rivers at Woodcuts and Rotherley and Woodyates, eleven miles south-west of Salisbury, near the Roman road from Old Sarum (Sorbiodunum) to Dorchester in Dorset[2]. Here you may search in vain for vestiges

to do with Samos But no one now would suppose that it had. Of the various substitutes suggested, 'Pseudo-Arretine' is clumsy, and 'Terra Sigillata' is at least as incorrect

[1] The village has been excavated to some extent and intermittently, since 1892. But the results have not been yet adequately published. The Glastonbury Antiquarian Society issued a pamphlet, *The British Lake Village near Glastonbury*, in 1899, and chance items have appeared in various periodicals and books. Some excavations in 1902 and 1904 are described in the *Proceedings of the Somerset Archaeol. Society*, vols. xlviii and l. The objects discovered are nearly all in the Glastonbury Museum.

[2] Described in four quarto volumes, *Excavations in Cranborne Chase near Rushmore*, &c., issued privately by Gen. Pitt-Rivers, 1887–1898

Fig 11 Head of Male Gorgon, from the Pediment of the Temple of Sul Minerva at Bath

To face p 202]

of the native art or of that delight in artistic ornament which characterizes it. Everywhere the monotonous Roman culture meets the eye. To pass from Glastonbury to Woodcuts, is like passing from some old timbered village of Kent or Sussex to the uniform streets of a modern city suburb. Life at Woodcuts had, no doubt, its barbaric side. One writer who has discussed its character with a view to the present problem[1] comments, with evident distaste, on 'dwellings connected with pits used as storage rooms, refuse sinks, and burial places' and 'corpses crouching in un-Roman positions.' The first feature is not without its parallels in modern countries, and it was doubtless common in ancient Italy. The second would be more significant, if such skeletons occupied all or even the majority of the graves in these villages. Neither feature really mars the broad result, that the material life was Roman. Perhaps the villagers knew little enough of the Roman civilization in its higher aspects. Perhaps they did not speak Latin fluently or habitually. They may well have counted among the less Romanized of the southern Britons. Yet round them too hung the heavy inevitable atmosphere of the Roman material civilization.

The facts which I have tried to set forth in the preceding paragraphs seem to me to possess more weight than is always allowed. Some writers, for instance M. Loth, speak as if the external environment of daily life, the furniture and decorations and architecture of our houses, or the clothes and buckles and brooches of our dress, bore no relation to the feelings and sentiments of those that used them. That is not a tenable proposition. The external fabric of life is not a negligible quantity but a real factor. On the one hand, it is hardly credible that an unromanized folk should adopt so much of Roman things as the British did, and yet remain uninfluenced. And it is equally incredible that, while it remained unromanized, it should either care or understand how to borrow all the externals of Roman life. The truth of this was clear to Tacitus in the days when the Romanization of Britain was proceeding. It may be recognized in the East or in Africa to-day, and even among the civilized nations of the present age the recent growth of stronger national feelings has been accompanied by a preference for home-products and home-manufactures and a distaste for foreign surroundings.

[1] Vinogradoff, *Growth of the Manor*, p 39. A parallel to the non-Roman burials found by Gen. Pitt-Rivers may be found in the will of a Lingonian Gaul who died probably in the latter part of the first century Apparently he was a Roman citizen, and his will is drawn in strict Roman fashion. But its last clause orders the burning of all his hunting apparatus, spears and nets, &c., on his funeral pyre, and thus betrays the Gaulish habit (Bruns, p 275)

I have now dealt with the language and the material civilization of the province of Britain. I pass on to a third and harder question, the legal and economic framework of Romano-British life. Here, more even than in any other part of the subject, our direct knowledge is singularly scanty. Britain, we know, contained five municipalities of the privileged Italian type. The *colonia* of Camulodunum (Colchester) and the *municipium* of Verulamium (St. Albans), both in the south-east of the island, were established soon after the Claudian conquest. The *colonia* of Lindum (Lincoln) may have been founded in the Flavian period (A. D. 70–96), during the early part or the middle of which the legion at Lincoln was probably pushed forward to York. The *colonia* at Glevum (Gloucester) arose in A. D. 96–98, as an inscription seems definitely to attest. Lastly, the *colonia* at Eburacum (York) must have grown up during the second or the early third century, under the ramparts of the legionary fortress, and separated from it only by the intervening river Ouse[1]. Each of these five towns had, doubtless, its dependent *ager attributus*, which may have been as large as an average English county, and each provided the local government for its territory[2]. But that accounts, on the most liberal estimate, for barely one-eighth of the civilized area of the province.

Of the rest, some part may have been included in the Imperial Domains, which covered wide tracts in every province and were administered for local purposes by special procurators of the Emperor. The lead-mining districts—Mendip in Somerset, the neighbourhood of Matlock in Derbyshire, the Shelve Hills west of Wroxeter, the Halkyn region in Flintshire, the moors of south-west Yorkshire—must have belonged to these Domains, and for the most part are actually attested by inscriptions on lead-pigs as Imperial property. Of other domain lands we meet one early instance at Silchester in the reign of Nero[3]—perhaps the confiscated estates of some British prince

[1] The fortress was situated on the left or east bank of the Ouse close to the present cathedral, which stands wholly within its area. A part of the Roman walls can still be traced, especially at the so-called Multangular Tower. The municipality lay on the other (west) bank of the Ouse, near the railway station, where various mosaics indicate dwelling-houses. Its outline and plan are however not known. Even its situation has not been generally recognized.

[2] If the evidence of milestones may be pressed, the 'territory' of Eburacum extended southwards at least twenty miles to Castleford, and that of Lincoln at least fourteen miles to Littleborough (*Ephemeris Epigraphica*, vii. 1105, where the last two lines are AVGG EB|MP XX (or XXII), and 1097). The general size of these municipal territoria is amply proved by continental inscriptions.

[3] Tile found in 1904, inscribed NERCLCÆAVGER, *Nero Claudius Caesar Augustus Germanicus*. It differs markedly from the ordinary tiles found at Sil-

or noble—and though we have no further direct evidence, the analogy of other provinces suggests that the area increased as the years went by. Yet it is likely that in Britain, as indeed in Gaul [1], the domain lands were comparatively small in amount. Like the municipalities, they account only for a part of the province.

Throughout all the rest of the British province, or at least of its civilized area, the local government was probably organized on the same cantonal system as obtained in northern Gaul. According to this system the local unit was the old territory of the tribe or canton, and the local magistrates were the chiefs or nobles of the tribe. That may appear at first sight to be a native system, and wholly out of harmony with the Roman method of government by municipalities. Yet such was not its actual effect. The cantonal or tribal magistrates were classified and arranged just like the magistrates of a municipality. Even the same titles were in use. The cantonal *civitas* had its *duoviri* and quaestors and so forth, and its *ordo* or senate, precisely like any municipal *colonia* or *municipium*. So far from wearing a national aspect, this cantonal system merely became one of the influences which aided the romanization of the country. It did not, indeed, involve, like the municipal system, the substitution of an Italian for a native institution. Instead, it permitted the complete remodelling of the native institution by the interpenetration of Italian influences.

We can discern the cantonal system at several points in Britain. But the British cantons were smaller and less wealthy than those of Gaul, and therefore they have not left their mark, either in monuments or in nomenclature, so clearly as we might desire. Many inscriptions record the working of the system in Gaul. Many modern towns—Paris, Reims, Chartres, and half a hundred others—derive their present names from those of the ancient cantons, and not from those of the ancient towns. In Britain we find only one such inscription (fig. 12) [2],

chester, and obviously belongs to a different period in the history of the site. The estate, or whatever it was, may not have remained imperial after Nero's fall: compare Plutarch, *Galba* 5. The Combe Down *principia* (C. vii. 62) may supply another instance, of about A.D. 210.

[1] Hirschfeld in Lehmann's *Beiträge zur alten Geschichte*, ii. 307, 308. Much of the Gaulish domain land appears to date from confiscations in A.D. 197.

[2] Found at Venta Silurum (Caerwent) in 1903: *leg. legi[i] Aug. proconsul(i) provinc. Narbonensis, leg. Aug. pr. pr. provi. Lugudunensis, ex decreto ordinis respublica civit(atis) Silurum*—a monument erected by the cantonal senate of the Silures to some general of the legion at Isca Silurum, twelve miles from Caerwent—perhaps to Claudius Paulinus, early in third century (*Athenaeum*, Sept. 26, 1903; *Archaeologia*, lix. 120). Other inscriptions mention a *civis*

only one town called in antiquity by a tribal name—and that a doubtful instance [1]—and no single case of a modern town name which
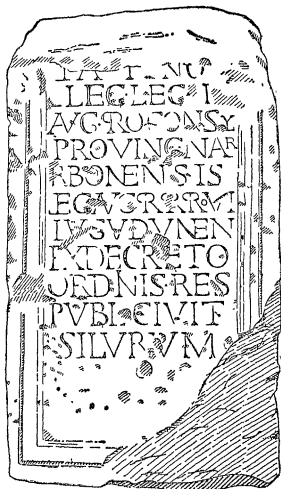
FIG. 12 INSCRIPTION FOUND AT CAERWENT (VENTA SILURUM) MENTIONING A DECREE OF THE SENATE OF THE CANTON OF SILURES.

is derived from the name of a tribe [2]. We can only say that the system

Cantius, a *civitas Catuvellaunorum*, &c , but their evidence is less distinct and is wholly silent as to the cantonal government.

[1] *Icinos* in *Itin. Ant.* 474. 6 may be Venta Icenorum, *Victoria Hist of Norfolk*, i. 286, 300.

[2] Canterbury may seem an exception But its name comes ultimately from Cantium, not from the Cantii. In the south-west and in Wales, tribal names like Dumnonii, Demetae, Ordovices, have lingered on in one form or another,

existed, and existed (apparently) in exactly the same form as in Gaul. But it was weak. It went down only too easily when the Empire fell.

Of the smaller local organizations, little can be said. Towns existed. But most of them were tribal capitals—as titles like Calleva Atrebatum or Corinium Dobunorum imply—and were doubtless ruled by the senates and magistrates of the tribes. It is idle to guess who administered the towns that were not such capitals or who controlled the various villages scattered through the country. Nor can we pretend to know much more about the size and character of the estates which corresponded to the country houses and farms of which remains survive. The 'villa' system of demesne farms and serfs or *coloni*[1] which obtained elsewhere, was doubtless familiar in Britain, and the Theodosian Code definitely refers to British *coloni*. But whether it was the only rural system in Britain, is beyond proof, and previous attempts to work out the problem have done little more than demonstrate the fact[2]. It is quite possible that here, or indeed in any province, other forms of estates and of land tenure may have existed beside the predominant villa[3]. The one thing needed is evidence. And in any case the net result appears to stand fast. The bulk of British local government must have been carried on by Roman municipalities, by imperial estates, and still more by tribal

and according to Prof Rhŷs, Bernicia is derivable from Brigantes. But these cases differ entirely from the Gaulish parallels mentioned in the text.

[1] The term 'villa' is generally used to denote Romano-British country houses and farms, irrespective of their legal classification. The use is so firmly established, both in England and abroad, that it would be idle to attempt to alter it. But for clearness I have thought it better in this paper to employ the term 'villa' only where I refer to the definite 'villa' system.

[2] For instance Mr Seebohm (*English Village Community*, pp 254 foll.) connects the suffix 'ham' with the Roman 'villa' and apparently argues that the occurrence of the suffix indicates in general the former existence of a 'villa'. But his map showing the percentage of local names ending in 'ham' in various counties disproves his view completely. For the distribution of the suffix 'ham' and the frequency of Roman country houses and farms do not coincide. In Norfolk, for instance, 'ham' is common, but there is hardly a trace of a Roman country house or farm in the whole county (*Victoria Hist of Norfolk*, i. pp 294–298). Somerset on the other hand is crowded with Roman country houses and has hardly any 'hams.'

[3] Vinogradoff, *Growth of the Manor* (ch. ii), argues strongly for the existence of Celtic land tenures besides the Roman 'villa' system. 'There was room (he suggests) for all sorts of conditions, from almost exact copies of Roman municipal corporations and Italian country houses to tribal arrangements scarcely coloured by a thin sprinkling of imperial administration' (p. 83). As will be seen, I think this not improbable. But I can find no definite proof of it. If the condition of northern Gaul were better known to us, it might provide a decisive analogy. But the Gaulish evidence itself seems at present disputable.

civitates working on a Romanized constitution. The bulk of the landed estates must have conformed in their legal aspects to the 'villas' of other provinces. Whatever room there may be for survival of native customs or institutions, we have no evidence that they survived within the Romanized area, either in great amount or in any form which contrasted with the general Roman character of the country.

From this consideration of the evidence available to illustrate the Romanization of Britain, I pass to inquire how far history helps to trace the chronology of the process. A few facts emerge to guide us. It is fairly certain that the whole lowland area, as far west as Exeter and Shrewsbury, and as far north as the Humber, was conquered before Claudius died, and Romanization may have commenced at once. Thirty years later Agricola, who was obviously a better administrator than a general, openly encouraged the process. According to Tacitus, his efforts met with great success. Latin began to be spoken, the toga to be worn, temples, town halls, and private houses to be built in Roman fashion [1]. Certainly it is just at this period (about 80-85 A.D.) that towns like Silchester, Bath, Caerwent (Venta Silurum), seem to take definite shape [2], and civil judges (*legati iuridici*) were appointed, presumably to administer the justice more frequently required by the advancing civilization [3]. In A.D. 85 it was thought possible to reduce the garrison by a legion and some auxiliaries [4]. Progress, however, was not maintained. About 115–120, and again about 155–160 and 175–180, the northern part of the province was vexed by serious risings, and the civilian area was doubtless kept somewhat in disturbance [5]. Probably it was at some point

[1] Tac. *Agr.* 21, quoted in note 2 to p. 3.

[2] Silchester was plainly laid out in Roman fashion all at once on a definite street plan, and though some few of its houses may be older, the town as a whole seems to have taken its rise from this event. The evidence of coins implies that the development of the place began in the Flavian period (*Athenaeum*, Dec. 15, 1904). At Bath the earliest datable stones belong to the same time (*Victoria Hist. of Somerset*, vol. i, Roman Bath), the first being a fragmentary inscription of A.D. 76. At Caerwent the evidence is confined to coins and fibulae, none of which seem earlier than Vespasian or Domitian: for the coins see *Clifton Antiq. Club's Proceedings*, v. 170–182.

[3] A. von Domaszewski, *Rhein. Mus.*, xlvi. 599; C. ix. 5533 (as completed by Domaszewski), inscription of Salvius Liberalis; C. iii. 2864=9960, inscription of Iavolenus Priscus. Both these *iuridici* belong to the Flavian period. Other instances are known from the second century.

[4] *Classical Review*, xviii (1904) 458; xix (1905) 58, withdrawal of Batavian cohorts. The withdrawal of the *Legio ii Adiutrix* is well known.

[5] See my papers in *Archaeologia Aeliana*, xxv. (1904) 142–147, and *Proceedings of Soc. of Antiq. of Scotland*, xxxviii. 454.

in this period that the flourishing country town Isurium (Aldborough), fifteen miles from York, had to shield itself by a stone wall and ditch[1]. Peace hardly set in till the opening of the third century. It was then, I think, that country houses and farms first became common in all parts of the civilized area. The statistics of datable objects discovered in these buildings seem conclusive on this point. Except in Kent and the south-eastern region generally, coins and pottery of the first century are infrequent, and many sites have yielded nothing earlier than A.D. 250. Despite the ill name that attaches to the third and fourth centuries, they were perhaps for Britain, as for parts of Gaul[2], a period of progressive prosperity. Certainly, the number of British country houses inhabited during the years A.D. 250–350 must have been very large. Prosperity culminated perhaps in the Constantinian age. Then, as Eumenius tells us, skilled artisans abounded in Britain far more than in Gaul, and were fetched from the island to build public and private edifices as far south as Autun[3]. Then also British corn was largely exported to the Rhine valley[4], and British cloth earned a notice in the eastern Edict of Diocletian[5]. The province at that time was a prosperous and civilized region, where Latin speech and culture might be expected to prevail widely.

But no golden age lasts long. Before 350 Constans had to cross the Channel and repel the Picts[6]. After 369 such aid was more often and more urgently required. Significantly enough, many

[1] The town wall of Isurium, partly visible to-day in Mr A S Lawson's garden, is constructed in a fashion which suggests rather the second century than the later date when most of the town walls in Britain and Gaul were probably built, the end of the third or even the fourth century Moreover its stones show the 'diamond brooching,' which occurs on the Vallum of Pius (*Glasgow Archaeol. Soc , Antonine Wall Report*, p. 61, plate, and recent finds) and which must therefore have been in use during the second century

[2] Mommsen, *Röm. Gesch* , v 97, 106, and Ausonius, *passim*.

[3] Eumenius, *Paneg Constantio Caesari*, 21 *civitas Aeduorum . . plurimos quibus illae provinciae* (Britain) *redundabant accepit artifices, et nunc exstructione veterum domorum et refectione operum publicorum et templorum instauratione consurgit.*

[4] Ammianus, xviii 2. 3 ; Zosimus, iii. 5

[5] Edict Diocl xix. 36. Compare Eumenius, *Paneg. Constantino Aug.*, 9 *pecorum innumerabilis multitudo . onusta velleribus*, and *Constantio Caesari*, 21 *tanto laeta munere pastionum.* Traces of dyeing works have been discovered at Silchester (*Archaeologia*, liv 460, &c) and of fulling in rural dwellings at Chedworth in Gloucestershire, Darenth in Kent, and Titsey in Surrey (Fox, *Archaeologia*, lix)

[6] Ammianus, xx. 1. The expedition was important enough to be recorded—unless I am mistaken—on coins such as those which show victorious Constans on a galley, recrossing the Channel after his success (Cohen, 9–13, &c)

of the lists of coins found in country houses close about 350–360. The rural districts, it is plain, began then to be no longer safe, and some houses were burnt by marauding bands, and some abandoned by their owners[1]. Therewith came necessarily, as in many other provinces, a decline of Roman influences and a rise of barbarism. Men took the lead who were not polished and civilized Romans of Italy or of the provinces, but warriors and captains of warrior bands. The Menapian Carausius, whatever his birthplace[2], was the forerunner of a numerous class. Finally, the great raid of 406–407 and its sequel severed Britain from Rome. A wedge of barbarism was driven in between the two, and the central government, itself in bitter need, ceased to send officers to rule the province and to command its troops. Britain was left to itself. Yet even now it did not seek separation from Rome. All that we know supports the view of Mommsen. It was not Britain which broke loose from the Empire, but the Empire which gave up Britain[3].

Such is, in brief, the positive evidence, archaeological, linguistic, and historical, which illustrates the Romanization of Britain. The conclusions which it allows seem to be two. First, and mainly, the Empire did its work in our island as it did generally on the western continent. It Romanized the province, introducing Roman speech and thought and culture. Secondly, this Romanization was perhaps not uniform throughout all sections of the population. Within the lowlands the result was on the whole achieved. In the towns and among the upper class in the country Romanization

[1] See, for example, the coin finds of the country houses at Thruxton, Abbots Ann, Clanville, Holbury, Carisbrooke, &c., in Hampshire (*Victoria Hist. of Hants*, i. 294 foll.). The Croydon hoard deposited about A.D. 351 (*Numismatic Chronicle*, 1905, p. 37) may be assigned to the same cause.

[2] It is hard to believe him an Irishman, though Professor Rhŷs supports the idea (*Cambrian Archaeol. Assoc., Kerry Meeting*, 1891). The one ancient authority, Aurelius Victor (xxxix. 20), describes him simply as *Menapiae civis*. The Gaulish Menapii were well known, the Irish Menapii were very obscure, and the brief reference can only refer to the former.

[3] Mommsen, *Röm. Gesch.*, v. 177. Zosimus, vi. 5 (A.D. 408), in a very puzzling passage describes Britain as revolting from Rome when Constantine was tyrant (A.D. 407–411). It is generally assumed that when Constantine failed to protect these regions, they set up for themselves, and in that troubled time such a step would be natural enough. But Zosimus, a little later on (vi. 10, A.D. 410), casually states that Honorius wrote to Britain, bidding the provincials defend themselves (if that be what his brief phrase means), so that the act of 408 cannot have been final. In any case the 'groans of the Britons' recorded by Gildas show that the island clung to Rome long after 410. On Constantine see Freeman, *Western Europe in the Fifth Century*, pp. 48, 148, and Bury, *Life of St. Patrick*, p. 329.

was substantially complete—as complete as in northern Gaul, and possibly indeed even more complete. But both the lack of definite evidence and the probabilities of the case require us to admit that the peasantry may have been less thoroughly Romanized. It was covered with a superimposed layer of Roman civilization. But beneath this layer the native element may have remained potentially, if not actually, Celtic, and in the remoter districts the native speech may have lingered on, like Erse or Manx to-day, as a rival to the more fashionable Latin. How far this happened actually within the civilized lowland area we cannot tell. But we may be sure that the military region, Wales and the north, never became thoroughly Romanized, and Cornwall and western Devon also lie beyond the pale (p. 8). Here the Britons must have remained Celtic, or at least capable of a reversion to the Celtic tradition. Here, at any rate, a Celtic revival was possible.

So far we have considered the province of Britain while it still remained in real fact a province. Let us now turn to the sequel and ask how it fits in with its antecedents. The Romanization, we find, held its own for a while. The sense of belonging to the Empire had not quite died out even in sixth-century Britain. Roman names continued to be used, not exclusively but freely enough, by Britons. Roman 'culture words' seem to survive in the later British language, and some at least of these may be traceable to the Roman occupation of the island. Roman military terms occur, if scantily. Roman inscriptions are occasionally set up. The Roman period in Britain was plainly no mere interlude, which passed without leaving a mark behind [1]. But it was crossed by two hostile forces, a Celtic revival and an English invasion.

The Celtic revival was due to many influences. We may find one cause for it in the Celtic environment of the province. After 407 the Romanized area was cut off from Rome. Its nearest neighbours were now the less-Romanized Britons of districts like Cornwall and the foreign Celts of Ireland and the north. These were weighty influences in favour of a Celtic revival. And they were all the more potent because, about the period under discussion, the opening of the fifth century, a Celtic migration seems to have set in from

[1] Much of the ornamentation used by post-Roman Celtic art comes from Roman sources, in particular the interlaced or plaitwork, which has been well studied by Mr. Romilly Allen. But how far it is borrowed from Romano-British originals and how far from similar Roman provincial work on the Continent, is not very clear. See p. 198.

the Irish coasts The details of this migration are unknown, and the few traces which survive of it are faint and not altogether decisive. The principal movement was that of the Scotti from North Ireland into Caledonia, with the result that, once settled there, or perhaps rather in the course of settling there, they went on to pillage Roman Britain. There were also movements in the south, but apparently on a smaller scale and a more peaceful plan[1]. At a date given commonly as A. D. 265–270—though there does not seem to be any good reason for it—the Dessi or Déisi were expelled from Meath and a part of them settled in the far south-west of Wales, in the land then called Demetia. This was a region which was both thinly inhabited and imperfectly Romanized. In it fugitives from Ireland might easily find room. The settlement may have been formed, as Prof. Bury suggests, with the consent of the Imperial Government and under conditions of service. But if the newcomers were few and their new homes were in the remote west beyond Carmarthen (Maridunum), formal consent would hardly have been required, and, as dates are uncertain, it is perhaps safer not to decide this point. Other Irish immigrants probably followed. Their settlements were apparently confined to Cornwall and the south-west coast of Wales, and their influence may easily be overrated. Some, indeed, came as enemies, though perhaps rather as enemies to the Roman than to the Celtic elements in the province. Such must have been Niall of the Nine Hostages who was killed—according to the traditional chronology—about A. D. 405 on the British coast and perhaps in the Channel itself

All this must have contributed to the reintroduction of Celtic national feeling and culture. A Celtic immigrant, it may be, was the man who set up the Ogam pillar at Silchester (fig 13), which was discovered in the excavations of 1893.[2] The circumstances of

[1] Professor Rhŷs, *Cambrian Archaeol. Assoc Kerry Meeting*, 1891, and *Celtic Britain* (ed 3, 1905, p. 247), is inclined to minimize the invasions of the south of Britain (Cornwall and Wales). Professor Bury (*Life of St. Patrick*, p. 288) tends to magnify them, see also Zimmer, *Nennius Vindicatus*, p. 84 foll The decision of the question seems to depend upon whether we should regard the Goidelic elements visible in western Britain as due in part to an original Goidelic population or ascribe them wholly to Irish immigrants At present philologists do not seem able to speak with certainty on this point.

[2] *Archaeologia*, liv 233, 441, Rhŷs and Brynmor Jones, *Welsh People*, pp. 45, 65; *Victoria Hist. of Hampshire*, i. 279, *English Hist Rev* xix 628. Whether the man who wrote was Irish or British depends on the answer to the question set forth in the preceding note. Unfortunately we do not know when the Ogam script came first into use. But Professor Rhŷs tells me that the Silchester example may quite conceivably belong to the fifth century.

the discovery show that this pillar belongs to the very latest period in the history of Calleva. Its inscription is Goidelic: that is, it does not belong to the ordinary Callevan population. It may be best explained, I think, as the work of some western Celt who reached Silchester before its British citizens abandoned it in despair. We do not know the date of that event, though we may conjecturally put it before A.D. 500. In any case an Ogam monument had been set up before it occurred, and the presence of such an object there proves that Celtic things had come to be tolerated even in this eastern Romanized town.

FIG 13. OGAM INSCRIPTION FROM SILCHESTER.

But a more powerful aid to the revival may be found in another fact. That is the destruction of the Romanized part of Britain by the invading Saxons. War, and especially war against invaders, must always weaken the higher forms of any country's civilization. Here the agony was long, and the assailants cruel and powerful; and the country itself was somewhat weak. Its wealth was easily exhausted. Its towns were small. Its fortresses were not impregnable. Its leaders were divided and disloyal. Moreover the assault fell on the very parts of Britain which were the seats of Roman culture. Even in the early years of the fourth century it had been found necessary to defend the coasts of Essex, Kent, and Sussex, some of the most thickly populated and highly civilized parts of Britain, against the pirates. Fifty or seventy years later the raiders, whether English seamen or Picts and Scots from Caledonia and Ireland, devastated most parts of the province and probably reached even the midlands[1]. When,

[1] Patrick was carried off from Bannavem Taberniae. If this represents Bannaventa near Daventry in Northants (*Victoria Hist.* i 186), the raids must have covered all the midlands. See *Engl Hist Review*, 1895, p 711, Zimmer,

seventy years later still, the English came, no longer to plunder but to settle, they occupied first the Romanized area of the island. As the Romano-Britons retired from the south and east, as Silchester was evacuated in despair[1] and Bath and Wroxeter stormed and left desolate, the very centres of Romanized life were extinguished. During the long series of disasters, many of the Romanized inhabitants of these regions must have perished. Many must have fallen into captivity and slavery, and may have been sold into foreign lands. The remnant, such as it was, doubtless retired to the west. But, in doing so, it exchanged the region of walled cities and civilized houses, of city life and Roman culture, for a Celtic land. No doubt it attempted to keep up its Roman fashions. The writers may well be correct who speak of two conflicting parties, Roman and Celtic, among the Britons of the sixth century. But the Celtic element triumphed. Gildas, about A.D. 540, describes a Britain confined to the west of our island, which is very largely Celtic and not Roman.[2] Had the English invaded the island from the Atlantic, we might have seen a different spectacle. The Celtic element would have perished utterly: the Roman would have survived. But the attack fell on the east and south of the island, that is, on the lowlands of Britain. Safe in its western hills, the Celtic revival had full course.

It is this Celtic revival which can best explain the history of Britannia minor, Brittany across the seas in the western extremity of Gaul. How far this region had been Romanized during the first four centuries seems uncertain. Towns were scarce in it and country houses, though not infrequent or insignificant, were unevenly distributed. At some period not precisely known, perhaps in the first half or the middle of the third century, it was in open rebellion, and the commander of the sixth legion (at York), one Artorius Justus, was sent with a part of the British garrison to reduce it to obedience.[3]

Realencycl. fur protestantische Theologie, x (1901), Art. Keltische Kirche; Bury, *Life of St. Patrick*, p. 322

[1] *Engl. Hist Review*, xix. 625; Fox, *Victoria Hist. of Hampshire*, i 371–372.

[2] How much of Britain was still British when Gildas wrote, he does not tell us. But he mentions only the extreme west (Damnonii, Demetae); his general atmosphere is Celtic, and his rhetoric contains no references to a flourishing civilization. We may conclude that the Romanized part of Britain had been lost by his time, or that, if some part was still held by the British, long war had destroyed its civilization. Unfortunately we cannot trust the traditional English chronology of the period. As to the date of Gildas, cf W. Stevenson, *Academy*, 26 Oct. 1895, &c. I see no reason to put either Gildas or any part of the *Epistula* later than about 540.

[3] C. iii 1919 = Dessau 2770 The inscription must be later than (about) A.D. 200, and it somewhat resembles another inscription (C iii 3228) of the

It may therefore have been, as Mommsen suggests, one of the least Romanized portions of Gaul, and in it the native idiom may have retained unusual vitality. Yet it would probably have become assimilated to the general Romano-Gaulish civilization, had its Celtic elements not received fresh strength from a British immigration. This immigration is usually described as an influx of refugees fleeing from Britain before the English advance. That, no doubt, was one side of it. But the principal immigrants, so far as we know the names, came from Devon and Cornwall [1], and some certainly did not come as fugitives. The King Riotamus who (as Jordanes tells us) brought 12,000 Britons in A. D. 470 to aid the Roman cause in Gaul, was plainly not seeking shelter from the English [2]. We must connect him, and indeed the whole fifth-century movement of Britons into Gaul, with the Celtic revival and with the same causes that produced, for instance, the Scotic invasion of Caledonia.

This destruction of Romano-British life produced a curious result which would be difficult to explain if we could not assign it to this cause. There is a marked and unmistakable gap between the Romano-British and the later Celtic periods. However numerous may be the Latin personal names and 'culture words' in Welsh, it is beyond question that the tradition of Roman days was lost in Britain during the fifth or early sixth century. That is seen plainly in the scanty literature of the age. Gildas wrote about A. D. 540, three generations after the Saxon settlements had begun. He was

reign of Gallienus, which mentions *milites vexill leg Germanician et Britannician. cum auxiliis earum*. Presumably it is either earlier than the Gallic Empire of 258–273, or falls between that and the revolt of Carausius in 287. The notion of O. Fiebiger (*De classium Italicarum historia*, in *Leipziger Studien*, xv 304) that it belongs to the Aremoric revolts of the fifth century is, I think, wrong. Such an expedition from Britain at such a date is incredible.

[1] The attempt to find eastern British names in Brittany seems a failure. M. de la Borderie, for instance, thinks that Corisopitum (or whatever the exact form of the name is) was colonized from Corstopitum (Corchester on the Tyne, near Hadrian's Wall). But the latter was a tiny unimportant place, while the former has hardly an historical existence at all and may be an ancient error for *civitas Coriosolitum* (C. xiii (1), i p. 491).

[2] Freeman (*Western Europe in the Fifth Century*, p. 164) suggests that a migration of Britons into Gaul had been in progress, perhaps since the days of Magnus Maximus, and that by 470 there was a regular British state on the Loire, from which Riotamus led his 12,000. I should prefer to omit the agency of Maximius, and to derive Riotamus from the Celtic element in Britain. The evidence alike for Maximus and for the state on the Loire is weak, and the Celtic revival in our islands seems to provide a better setting for the obscure incident. If Prof. Bury is right (*Life of Patrick*, p. 354), Riotamus had a predecessor in Dathi, two generations earlier.

a priest, well educated, and well acquainted with Latin, which he once calls *nostra lingua* He was also not unfriendly to the Roman party among the Britons, and not unaware of the relation of Britain to the Empire[1]. Yet he knew substantially nothing of the history of Britain as a Roman province He drew from some source now lost to us—possibly an ecclesiastical or semi-ecclesiastical writer—some details of the persecution of Diocletian and of the career of Magnus Maximus[2]. For the rest, his ideas of Roman history may be judged by his statement that the two Walls which defended the north of the province—the Walls of Hadrian and Pius—were built somewhere between A. D 388 and 440. He had some tradition of the coming of the English about 450, and of the reason why they came. But his knowledge of anything previous to that event was plainly most imperfect.

The *Historia Brittonum*, compiled a century or two later, preserves even less memory of things Roman. There is some hint of a *vetus traditio seniorum* But the narrative which professes to be based on it bears little relation to the actual facts, the growth of legend is perceptible, and even those details that are borrowed from literary sources like Gildas, Jerome, Prosper, betray great ignorance on the part of the borrower[3]. On the other hand, the native Celtic instinct is more definitely alive and comes into sharper contrast with the idea of Rome. Throughout, no detail occurs which enlarges our knowledge of Roman or of early post-Roman Britain. The same features recur in later writers who might be supposed to have access to British sources. Geoffrey of Monmouth—to take only the most famous—asserts that he used a Breton book which told him all manner of facts otherwise unknown. The statement is by no means improbable. But, for all that, the pages of Geoffrey contain no new fact about the

[1] Mommsen, Preface to *Gildas* (Mon. Germ. Hist.), pp 9–10 Gildas is, however, rather more Celtic in tone than Mommsen seems to allow. Such a phrase as *ita ut non Britannia sed Romania censeretur* implies a consciousness of contrast between Briton and Roman. Freeman (*Western Europe*, p. 155) perhaps puts the case too strongly the other way

[2] Magnus Maximus, as the opponent of Theodosius, seems to have been damned by the church writers. Compare the phrases of Orosius, vii. 35 (Theodosius) *posuit in Deo spem suam seseque adversus Maximum tyrannum sola fide maior proripuit* and *ineffabili iudicio Dei* and *Theodosius victoriam Deo procurante suscepit*. But I confess a doubt as to whether Gildas has not mixed up Magnus Maximus with Constantine

[3] The story of Vortigern and Hengist now first occurs and is obvious tradition or legend. A prince with a Celtic name may have ruled Kent in 450 There were, indeed, plenty of rulers with barbaric names in the fourth and fifth centuries of the Empire But the tale cannot be called certain history.

first five centuries which is also true[1]. From first to last, the Celtic tradition preserves no real remnant of recollections dating from the Romano-British age. Those who might have handed down such memories had either perished in wars with the English or sunk back into the native environment of the west[2]

But we are moving in a dim land of doubts and shadows. He who wanders here, wanders at his peril, for certainties are few, and that which at one moment seems a fact, is only too likely, as the quest advances, to prove a phantom. It is, too, a borderland, and its explorers need to know something of the regions on both sides of the frontier I make no claim to that double knowledge I have merely tried, using such evidence as I can, to sketch the character of one region, that of the Romano-British civilization.

[1] Thus, he refers to Silchester, and so good a judge as Stubbs has suggested that for this he had some authority now lost to us. Yet the mere fact that Geoffrey knows only the English name Silchester disproves this idea. Had he used a genuinely ancient authority, he would have (as elsewhere) employed the Roman name Another explanation may be given Geoffrey wrote in an antiquarian age when the ruins of Roman towns were being noted. Both he and Henry of Huntingdon seem to have heard of the Silchester ruins and accordingly he inserted the place into his story.

[2] The English medieval chronicles have sometimes been supposed to preserve facts otherwise forgotten about Roman times But, so far as I can judge, this is not the case, even with Henry of Huntingdon. Giraldus Cambrensis, when at Rome, saw some MS which contained a list of the five provinces of fourth-century Britain—otherwise unknown throughout the Middle Ages (*Archaeol Oxoniensis*, p. 224)

INTER-RELATION OF THE ACADEMICAL SCIENCES

By SHADWORTH H. HODGSON

FELLOW OF THE ACADEMY

Read March 14, 1906

I.

My aim in the paper which I now have the honour of reading before this meeting of the Academy is to contribute in some measure, however slight, to the furtherance of what I take to be the main purpose for which we exist as an Academy, which is our special justification as an Academy, and not merely one among the learned Societies which for various purposes exist around us, the purpose namely of bringing the various mental and moral sciences into co-operation, and rendering their results more readily accessible to one another than they would otherwise be; these sciences being those which find their object-matter in some branch of human activity, that is, in what men consciously feel and think and are and do, just as the positive physical sciences find the object of their study in Matter and physical energies of every kind.

It is thus what may be called the internal organization of the Academical Sciences that I have in view in the present paper. Our President, in his Address delivered at our first Annual General Meeting, on June 26, 1903, has repeatedly and emphatically insisted on the corporate organization of the students of these sciences as the great purpose of the Academy, and has well shown its necessity and described its advantages. To what he has so admirably said on these points I have nothing to add. It is rather to the relation of the sciences themselves to one another, that is, their internal organization as a body of knowledge, that I propose to address myself. Here perhaps there is room for some further observations. For I think that, unless we were distinctly agreed upon the common ground which the four Sections of the Academy alike occupy, and which constitutes the nexus between them, by the knowledge of it being perceived as the ulterior End which all alike, as sciences of practice, have in view,

our four Sections would still be little more than a bundle of learned Societies accidentally associated, and not, strictly speaking, an organic unity. But in beginning as an Academy, which, whatever else it may be, is at any rate a Society for the intercommunication of ideas between the students of different subjects, rather than for the study of any subject or group of subjects separately, we have begun as an organic unity, and our division into Sections is the beginning of our organization as an unity, it remains to bring the nature and basis of that unity and of that organization into distinct consciousness.

Of course this does not involve the idea that a specialist in any one Section or Sub-section should become a specialist in any other, though, where any member is a member of more than one, it is doubtless a circumstance to be welcomed. The work of each Section must always be done by those who are specialists in that Section. A specialist's knowledge of its subject-matter is not to be expected of the members of the other Sections. The organization of which I speak consists, first, in the recognition, by specialists in all the Sections, of the ulterior end to which their special science is subordinate, to the attainment of which it is a contributory, and secondly in the readiness with which the best that is being thought and known in any Section can be brought within reach of workers in any other Section.

The first question, then, to be entertained and answered, in justification of our title of an Academy, is this,—in what does this common ulterior End, which is also the *nexus* and common basis of all our Sections, consist? It must be something which differentiates the purposes of all alike from the purposes of the group of simply natural and positive sciences which are directed to the discovery of the *de facto* laws of physical nature, increasing by that discovery the wealth of speculative knowledge, and the command which man has of physical agencies for the supply of his wants and for the effectuation of his purposes, whatever these may be. The discovery of the *de facto* laws of physical nature is thus the *differentia* of positive science, the End which specially characterizes it; we describe these phenomena and their laws in terms of matter, ether, motion, force, and energy, mechanical, chemical, magnetic, electrical, and so forth; and we abstract from the circumstance, that our knowledge or surmise of these energies, these phenomena, and their laws, consists of consciousness, or that consciousness is our only evidence for them, either for their nature or for their existence. That fact goes without saying, and is hardly ever adverted to. Of course I am not forgetting the constant use made of what is known as the 'personal equation'

in the observation of physical phenomena. But this is no objection or exception to the foregoing statement. In taking account of the 'personal equation' the observer himself is thought of as an instrument, an object of observation in just the same sense as the objects which he observes. The idea that his consciousness is his only evidence for his own existence does not, or at least need not, occur to him.

But when we come to phenomena in thinking of which we can no longer make abstraction from modes or forms of consciousness, seeing that these are involved in the thought of the phenomena themselves, which is the case whenever we think of a desire, or of an interest, or of a purpose of any kind, or compare different Ends or purposes together in respect of their preferability or value, real or apparent, notwithstanding that the purpose or end itself may be described simply as some change to be wrought in physical matter,—as, for instance, when a flint arrow-head, or a piece of pottery, unearthed from a grave-mound, derives its present interest for the archaeologist simply from the fact that it has, ages ago, supplied the felt needs, interests, or purposes of conscious beings, and from the light which it thereby throws upon their habits and attainments,—and since at the same time we have no immediate knowledge of the agency which is immediately concerned in supporting those modes or forms of consciousness,—then we inevitably find our point of view changed from what it was in the field of physical science; we adopt consciousness as our point of view, instead of abstracting from it; and we include in the thought and term *consciousness* the immediate agent or agency which supports it, but of which we have no immediate knowledge, calling the two taken together by the various names of I, Ego, Soul, Mind, or Self, and leaving open thereby problems of the greatest difficulty for Psychology to investigate, namely, in the first place that of the nature of the connexion between consciousness and the agent or agency immediately concerned in supporting it, and secondly that of the connexion between either consciousness or its immediately supporting agency and the other agencies at work in the living physical organism, which are the objects studied in biology and physiology.

The position of Psychology is thus unique among the sciences, it has a double character, it takes up the thread of investigation at the point where it is dropped by the positive physical sciences, it is itself both a positive, speculative, physical science, so far as it is based on biological and physiological knowledge, and it is a philosophical and Academical science, so far as it is based on

the phenomena of consciousness, and uses terms of consciousness in describing and investigating them. It is that science of the second group which connects the second group with the first. The conscious organism as the seat of individual consciousness, and the agent concerned in effectuating conscious purposes, is that which we have before us in all departments of this second or Academical group of sciences, however the problems mentioned above may finally be answered by Psychology as a special member of the group. Man, in short, and his conscious activities in every direction, and the relations of men with men, and with other conscious beings, are the object-matter of this second group of sciences; and the *differentia* of the group as a whole consists in its taking *consciousness* as the point of view from which it distinguishes, compares, and passes judgement on those various activities, and on the character and ability of the actors.

The question, then, which was proposed at starting, as to the ulterior End which all our Sections have before them, can now be answered. It is the harmonizing and organizing into a system the knowledge obtained, in each Section and Sub-section, of those conscious activities which are its special province, and that again with the still further purpose (inasmuch as all knowledge has some practical use as its end) of harmonizing and organizing those conscious activities themselves into a concerted and combined Life of mankind on earth, political, social, and individual. But with this further purpose, the application of knowledge in actual practice, that is to say, with Art as distinguished from Science, we have nothing as an Academy to do, except to criticize it from the scientific platform. It is with the Sciences of conscious activities, and with their organization as a system of knowledge, that we are concerned, as the ulterior End which our several Sections have before them. We are not a literary, or an aesthetic, or a moral, or a religious, or a juristic, or in the ordinary sense of the term a sociological, or in any way a political, but solely a scientific body. But our sciences, all the same, are sciences of practice. Arts, it is true, are also scientific, but that does not make them sciences of practice. From these they are properly distinguished by the name of practical sciences.

The conscious activities of men being thus the object-matter with which as a group of sciences we have to deal, it follows that we have to deal with them as defined and described by the modes of consciousness embodied in them, the purposes at which they are said to aim. Conscious life is a hierarchy of purposes. A purpose immediately aimed at is an End. An immediate purpose attained is a Means to a further purpose. The comparative value of purposes,

whether as means or as ends, is what we have to determine, and that in every department of inquiry. The whole of consciousness is teleological in the sense that the ultimate elements into which it may be analysed are distinguishable but never separable, that is, presuppose and are adapted to one another, without which correspondence and combination of elements the consciousness which they constitute would not exist, seeing that they are not consciousness in separation, and it is only by abstraction (which has always the concrete in the background) that we can think of them as separate.

For example, sensations of light or of colour are not sensations unless they occupy some form of superficial spatial extension, apart from which they exist only as abstractions introduced by thought. The same is true of sensations of touch and pressure; you cannot even think the thought of actually touching a mathematical point, at least when this is taken in the Euclidean sense of a division, not an atom, of space. Nor, again, can you think of pure space except by abstraction; pure space, as a pure existent not due to abstraction, is pure nonentity, it is not the same thing as pure vacuity, which is plainly an abstraction, that is, you have to think of filled space in order to think it. Time-duration, again, is an element of consciousness which is universally present in all feelings or modes of consciousness whatever, and which cannot itself be felt or thought of, except by abstraction, as separably existent, as a pure existent not due to abstraction, it would, like pure space, be a pure nonentity. And feelings which should be supposed to exist for no time-duration would plainly thereby be supposed not to exist at all.

There is therefore in all consciousness, and consequently in all things whatever which we can either positively know, or surmise, or imagine, as its objects, a teleologic character, a harmony of different elements, which is inherent in them and essential to their being what they are, the basis of, or rather identical with, their rationality. We may say that teleology, in this sense, and rationality are the same; teleologic being the name we give an idea or its object when we take its constituent elements or parts severally, and consider any one of them as if it was prior to the whole, and rational being the name we give it when we take it first as a whole, before considering the several elements or parts which analysis distinguishes as composing it. There is no idea, and consequently no object of an idea, which escapes this statical mode of consideration, so to call it, which nevertheless, however necessary and essential it may be, obviously tells us nothing as to what ideas are true and what fictitious, seeing that their teleology or rationality is essential to all ideas alike, simply in

their character of modes of consciousness, the *minima* of which are analysable into teleologic elements

In all ideas, then, from the least to the greatest, from that of a *minimum* of consciousness to that of the Universe or Totality of Existents, whatever else there may be, there is this teleologic or rational character. But ideas are not the ultimate *data* of consciousness; that is to say, consciousness does not come to us, or arise in us, in the form of ideas severally distinct from one another, any more than it arises in the form of *minima* of consciousness Attention to consciousness, or apperception in some shape or other, goes to the making both of an idea and of a *minimum*. Consciousness arises in the form of a stream, a time-stream of consciousness, the different parts of which, whether simultaneous or successive or overlapping, are distinguished from one another by differences in the feelings, sensations, emotions, and so on, which are the content of the time-duration, including those visual and tactual sensations and their combinations which are spatially extended also, and are our evidence for the existence of a spatially extended and material world, the premisses from which its nature and existence are inferred.

From this time-stream arises our idea of the distinction of Time into past, present, and future. In attention to any portion of the stream we observe it passing away and becoming what we call a *memory*; that is the *past*,—irrevocable. While still retained in consciousness without perceivable change, it is the *present*,—modifiable. Here our immediate knowledge ends, but attention is always anticipatory, always has a purpose in view, and in the simplest cases this purpose is merely that of feeling or knowing the present more vividly or more clearly. Still it is anticipation, purpose not yet realized, not yet actual consciousness; the present moment contains a present expectation of something which is not present but to come;—that is the *future*. Time-duration is the common element, the common nexus of the whole stream. The efficient causes (so to call them) which throw up, as it were, the successive present moments of the stream of consciousness lie, though unknown to us except by subsequent inference, in the past, as the stream itself also does. They belong to, and are part of, a series and system of agents and events which have been moving onwards from past to present, and will continue to move onwards from present to future, that is to say, in the opposite direction to that in which, as noted above, the consciousness moves to which they give rise, which is the direction from the actual present to the past of memory. The present moment of consciousness recedes into the past, or becomes a memory, in order of know-

ledge, or as part of our knowing, and advances into the future, or becomes a new present, in order of existence or real genesis from its efficient causes.

To render this less paradoxical than at first sight it may seem, it must be considered that every new present moment of consciousness, as it arises, has a twofold character, a twofold aspect, first, *what* it is, namely, its content as consciousness or as a knowing, and secondly the *fact that* it is, its character as an existent. And it is the perception that every actually present moment contains, as part of itself, a memory of what has been actually present the moment before, that gives the whole experience the character of a stream, a time-stream of consciousness, ever receding into the past as each new present moment arises and advances into the as yet unknown future. It is the content of consciousness, in which time-duration itself is an element, that is our evidence both for these two aspects of the stream, as a knowing and as an existent, and also for the opposite directions which the two aspects seem to take, the aspect of it as a knowing receding into the past, as the aspect of it as an existent advances into the future. In short, I draw a wide distinction between the *content* and the *existence* of consciousness (and of every portion or moment of it), but it is a distinction between inseparables.

Now, in its character of an existent, every present moment of consciousness depends, as we cannot but think, for its arising or genesis as an existent, upon some efficient cause or causes, so to call them, which have existed in the past, though unknown to us at the moment of operation. I pass over here the psychological question as to the nature of the proximate efficient cause or causes of consciousness. These do not now concern us. They lie wholly in the past. On the other hand, the purposes of the stream of consciousness, which belong to it in its character of a knowing, and therefore the purposes, if any, of its efficient causes, lie in the future, wholly unknown to us except as purposed, that is, by anticipation, though it will be to this same series and system of agents and events, moving from past to present and then to future, that, if they are realized, their realization will be due.

As conscious agents, then, we form part of what may be called a scheme or system of dynamic teleology, as compared to that system of statical teleology described above. The whole of consciousness is teleological, the whole of conscious activity is consciously teleological, directed to realize some purpose in the future, which in the present is anticipation only. The content of a purpose or anticipated end is also called a motive. But this term is ambiguous, and stands in

need of analysis. It includes the idea of a known, i. e. consciousness, and an unknown, i. e. activity or agency, in a single term. The analysis of motives, as distinguished from purposes or ends, is a question for Psychology, as that border science which includes the study of the efficient causation of consciousness as well as of consciousness itself, and of the connexion between them.

Barring this special psychological question, the sciences of the second or Academical group are directed to discover the meaning, and compare the relative value, of conscious actions, in all departments of conscious activity, without analysing the efficient agencies involved in the actions themselves, whether these belong to conscious beings or to inanimate nature, just as the sciences of the first group, the natural or physical sciences, are directed to discover the actual efficient agencies and their laws, which are operative in the production of all phenomena without distinction. And this, as it seems to me, is the true distinction between these two great groups of sciences, namely, not that the first deals with the laws of Matter, the second with those of Mind, but that the first deals with the laws of what we are accustomed to call efficient causation, the second with those of what we are accustomed to call final causation, being occupied with the meaning and value of things for conscious beings,—not with the question *How comes?* but with the question *What for?*—a question which can only be asked, and consequently only answered, if at all, in terms of consciousness. Just as the sciences of the first group make abstraction, as already said, of the fact that consciousness is the only evidence of any sort of existence, so those of the second group (with the exception of Psychology) make abstraction of the fact that purposes are only formed, or communicated, or realized, by means of some efficient agency which is not consciousness, though this fact is always present in the background, just as the corresponding abstraction, from consciousness, is present in the physical sciences. And this abstraction from the difference between the supporting agency and the consciousness supported by it is expressed and embodied in the universal and inevitable use of the personal pronouns, I and WE, whereby the two things, the consciousness and the agency, are represented as one thing, an unanalysable Conscious Agent.

II.

Now it is the primary purpose and function of Philosophy, which, with its cognate or subordinate sciences, Psychology, Ethic, Logic, Aesthetic, Theology, and possibly others, is the third of our four Sections, to push the analysis of the content of consciousness (which,

if I may repeat the remark, is our sole evidence for anything whatever) as far as self-consciousness enables us to push it It is this primary function, this selection for analysis of consciousness as a knowing, or as the evidence of everything, itself included, rather than any being or existence assumed as already known or knowable, which makes it a Metaphysic, and distinguishes it from a professedly philosophical Ontology. As ontology, philosophy would have no place among sciences which are founded on experience, as metaphysic it stands in relation to them all. Its first purpose is to show by its analysis what is the *meaning* of such terms as Being and Existence, or Reality as opposed to Appearance, instead of assuming their objects either as ultimate and unanalysable *data*, or as the objects of ultimate and unanalysable conceptions. Its second purpose is to explain, in the sense of rendering intelligible, the Totality of Existence, in case that purpose should be found attainable, and, if not attainable, at any rate to show by its analysis what and where are the limits, and in what their nature consists, which for ever forbid its attainment, and what is the character which is thereby imprinted upon the knowledge which lies within those limits, and is therefore conceivably attainable. Such are its purposes, and such its method. And the object-matter which it has before it, and to which its analysis has to be applied, is that view of the Totality of Existence which is taken by men in general, including the metaphysician himself, before they begin to philosophize, namely, speaking roughly, as a World of Persons and Things, of Substances and their Attributes, of Agents and their Agencies, which may fairly be called the common-sense view of things, and in this sense is the *explicandum* of philosophy.

But it is in its departments of Ethic, Logic, Aesthetic, and Theology, departments which are immediately dependent upon the metaphysical analysis of consciousness as a knowing, that Philosophy itself becomes definitely a science of practice, inasmuch as these sciences aim at influencing for the better certain departments of the actual practice of mankind, by applying to them ideas derived from metaphysical analysis. Perhaps we may say that Theology, which includes a criticism of all professedly Religious Creeds, is that department of philosophy in which this influence is most sensibly and most generally felt. It is there that men in general are most keenly alive to its influence, and most fervently resent its interference. Nevertheless it is based, like the rest, on the metaphysical and also (to use a lately coined word) metapsychical analysis of consciousness as a knowing, purged of those common-sense assumptions which belong in fact not to its *data* but to its *explicanda*.

Our remaining three Sections, namely those of History, Philology, and Law, with their Subdivisions, stand on a very different footing, they deal with the concrete actions of concrete conscious beings, assuming these as given and ascertained facts, that is, they stand frankly on what, as a metaphysician, I call the common-sense view of things, though each Section and Subdivision of a Section has its own method of defining and treating that portion of the whole object-matter which it selects as its own field, and its own function to perform in regard to it. But all the several sciences grouped under our four Sections existed as sciences, as our President in his first Address has told us, before a certain number of their devotees were gathered together into an Academy, just as the common-sense view of persons and things (as already remarked) existed long before Philosophy came into existence, as an inquiry into its meaning, its nature, and its genesis. What the Academy does for the sciences is to contribute to their organization as sciences, by bringing them, as well as their devotees, into closer touch with one another. The single comprehensive science which they may be imagined to compose, supposing their organization effected, is as yet unnamed, an ideal in the far distant future.

Of course I am very far from pretending to give even a sketch of the divisions and subdivisions of the sciences falling under any of our four Sections. Conscious human actions are the one object-matter common to all alike; their common basis, their common nexus. The divisions and subdivisions depend upon the point of view, the interest or purpose which determines the selection of the actions to be studied, and the method of studying them. The same actions may be studied from various points of view, and the sciences will therefore overlap and depend upon one another in various ways. It may be necessary at one time to inquire into the causes of actions from the remotest past, at another to anticipate their effects in the future from the known effects of similar actions in similar circumstances. The history of consciousness is the history of its evolution and development from as far back as we are able to trace its course (an infinitesimally small portion of the whole way) from its dawn in the lowest conceivable sentient being who was the first pre-human ancestor of man, to consciousness as it exists in man at the present day. That is history, the history of conscious beings in respect of their consciousness; and it manifestly depends not only on Psychology, but also on Biology, Physiology, and Ethnology, so far as this latter deals with the causes of the differentiation and affinities of races, and the peculiarities distinctive of their racial genius and

character. Owing to this dependence it is usually considered as outside History proper, taking this to be a science founded on records, whether documentary or archaeological, though in the Ethnology of recent or actually existing races it seems again to enter the strictly historical sphere.

Now by the term History, taken simply, the history of mankind at large, the history of men in society, is always intended, excluding the biography of individuals, except so far as this is subservient to the history of mankind. And I believe I am also right in saying, that it is to history proper (which is still the history of mankind) in the sense just ascribed to it, namely, as a science founded on records, in which it includes Archaeology, that our first Section is devoted. But this circumscription of its domain seems to have been reached, not by direct selection of such actions and events as can be vouched for by records or monuments of any kind as its object-matter, but rather by a process of retaining as its special domain what is left from History in its widest and most comprehensive sense, the History of conscious beings (in which, as just remarked, an important branch of Natural History is included), after separating from it certain matters which can be treated as the objects of special sciences, and the history of which therefore presupposes the formation of those special sciences and the selection of their special objects. Thus the history of consciousness as a separate existent presupposes and depends upon the selection of the conditions of consciousness as the object-matter of psychology; the history of language presupposes and depends upon the selection of speech oral and written, as the object-matter of philology, and the history of law presupposes and depends upon the selection, which in this case is a selection out of the phenomena of History proper, of law and legal relations as the object-matter of jurisprudence.

The history of Law can never as a fact be sundered from history proper. Laws are themselves documents, and of all documents they are the most important class, inasmuch as they mark the recognized stages of progress in all departments of human activity, and in all relations of human beings to one another, domestic, social, political, and international. They are also the evidence of the customs which prevailed before they were established, customs which may be called unwritten or pre-documentary laws, and upon which they operate by modifying them for an intended better. They introduce into the activities which are the object-matter of history proper the recognition of a new idea, the idea of what ought to be, in contradistinction from the idea of what simply as a fact is or has been. This idea is

the idea of Justice, of Right as distinguished from Might. The aim of all Law is to establish a just rule, to give might to right, instead of ascribing right to might as its indistinguishable attribute. The recognition of this idea is the foundation of the science of Jurisprudence. But whence is this idea derived? It is derived from those phenomena of consciousness which are the special object-matter of Ethic, a special department of Philosophy. Law, therefore, the object-matter of our fourth Section, has a double affinity; in its specially scientific character, as Jurisprudence, it is the offspring of the ethical idea of justice or of right; in its operation, that is, in the application of this idea to modify existing facts, it is a distinguishable but wholly inseparable department of history proper.

There are other special sciences which, like law, may be treated apart from history proper, though always as its subservients or contributories; for instance, the science of Political Economy and the science of War, the latter of which has a branch of law already recognized as applicable to it. But distinct from all such special sciences there will still remain, as the object-matter of history proper, all those dealings of men with one another in society, and of societies with one another, in connexion always with their physical conditions and circumstances, which require only a general knowledge of human nature, its motives and capacities (distinct from their psychological mechanism in individuals), in order to understand them, interpret their significance, and draw the conclusions which they warrant, for the guidance of present and future action. Domestic, social, political, and international actions are, in short, the field of History proper. And it need scarcely be mentioned how vast this field is, nor yet how closely it touches the daily life of individuals, nor yet how indispensable is true historical knowledge, taken simply as the ascertainment of actual matters of fact, for guiding that daily life aright. Historical science is a science of practice, and of that practice which every man of necessity practises, simply as a member of human society. Its true name therefore is Sociology.

It remains to say a few words of Philology, our second Section, and its selected object-matter, Language, that is to say, of oral and articulate speech addressed to the ear, and of writing, its symbol and representative, addressed to the eye. Its function also in both its modes is twofold; it serves to fix and thereby mediately to recall feelings and thoughts within the individual consciousness, and it serves to communicate the feelings and thoughts of one individual to others; it is, for psychological reasons, the all but indispensable medium both of thought and of intercommunication. It is therefore

almost as intimately and universally bound up with the conscious actions of human beings as consciousness itself. Its history is the history of its development and evolution from that point or points in its course at which we place the differentiation of man from his pre-human ancestors, a differentiation to which the formation of articulate forms of speech may itself have most effectively contributed. I say point or points in its course, because this differentiation may have taken place at spots of the earth's surface widely separate from one another geographically, and differing also in climate and other physical conditions, nor need the differentiations have occurred simultaneously. Philology is therefore capable of furnishing most important evidence to Ethnology. And at all periods of its history we find language a potent factor in moulding the ideas of those who speak it, whether it is their native tongue that they speak or one which they have adopted from others, and the familiar use of a common language, especially if native to those who use it, is notoriously one of the most powerful bonds of fellowship between men, however widely they may be scattered over the surface of the globe.

I come lastly to that function of language whereby it is most closely and intimately connected with the consciousness of individuals, though this can never be actually sundered from its function of intercommunication, the individuals being born and living, and except in the rarest cases of attempted isolation continuing to live, only in society. And here the first question to meet us is, What is meant by articulation, what are its essential characteristics? The utterance of sounds having, or capable of having, meaning of some sort is doubtless the concomitant of a reflex action initiated by feelings, or the proximate conditions of feelings, internal to the organism, whereby an association in consciousness between the feelings and the utterances is established. But this expressive utterance alone is not articulate language, however numerous, various in kind, and I may add complex, such associations may be, it is only, if the term may be permitted, its raw material. True, the establishment of the associations gives the sounds meaning, they express and serve to recall into consciousness the feelings or ideas with which they are associated, and those feelings or ideas are their meaning. But more than this is required to render them articulate. What is this *more?* I speak under correction from experts both in psychology and philology, though what I rather fear is, that I may seem to be giving undue prominence to what is already well understood and trite. Nevertheless it seems important to notice, that

the essential step towards turning utterances having meaning into articulate language is attention as an act of thought, attention first to the feelings or ideas whereby similar occurrences of them are grouped together as one feeling or idea in point of kind, which is the formation of general ideas, and secondly to the utterances expressing them, whereby similar occurrences of the utterances are perceived to be but one sound in point of kind, that is to say, to be one word, one term, expressing one general idea. Articulate speech or language is thus the work of thought operating on perception. It is co-extensive with thought, but not with consciousness in its entirety; for it presupposes the perceptions upon which it operates—that is, both the feelings or ideas originally expressed and the sounds originally expressing them, the latter of which become language expressing general ideas by the operation of thought.

The very first step in this process, the formation of general ideas by attending to the data, involves a judgement, such as we should express, language having once been formed, by a proposition: 'this colour is similar to that.' From this point the development of what are called the parts of speech follows easily. To express a particular instance, you must restrict a general term—*this* blue, *this* man; pronouns are used for nouns; then nouns substantive and nouns adjective are distinguished; verbs expressing activity and passivity are distinguished from verbs expressing simply event, such as 'it rains, it thunders'; and differences in actions and events are marked by differences of voice, mood, tense, number, and person, in the verbs expressing them, and by what may be called the adjectival forms of verbs, such as the participle and gerund. Then links are sought, expressing the relations of things to each other, by means of prepositions or by the case endings of nouns, by different forms for singular and plural, or by marking sex as by the genders. Similar links are sought to express the transitions of thought between one action or event and another, such are the conjunctions. Sentences are thus the articulation of language, and language has been an ever-advancing construction, from the first moment when men turned their attention to their own vocal utterances, as a means of fixing their own ideas or communicating them to others. It has grown up *pari passu* with their common-sense idea of themselves and the world about them, and (except in the case of technical or scientific symbolism) subserves no other needs than those of daily life, or than are capable of an expression in literature.

I need not stay to remark at length, how vast a field and what important regions of human life are brought within the province of

philology by its inseparable literary development. One limitation of it, however, should not be left unnoticed. Articulate language cannot alone communicate to the reader or hearer of it the sensations or the emotional feelings which it describes, with anything like the vividness or the certainty with which it communicates the ideas or the thoughts describing them. To do this even imperfectly, in the case of the emotional feelings, it depends upon accents, pauses, stresses, intonation, in short, upon the vocal modulation given to it by the reader or the speaker, as in singing and acting. That is, it depends upon the musical element in vocal utterance; and this belongs to the province of aesthetic, not of philology. Music, in fact, has been called the language of the emotions, and rightly so called, seeing that it expresses and communicates emotional feeling without the aid of imagery or of thought. Music has, no doubt, an articulation of its own, but it is not that articulate language with which philology is conversant.

The further articulation of language, the further evolution and development of its construction by devising or adopting new verbal forms to express new modifications of thought, as for instance a form to differentiate a word used to express a mode of consciousness from the same word used to express the object (which may also be one of the real conditions) of that mode;—say, e.g., light as a sensation in us from light as a motion in the luminiferous ether;—this is a task which, if practicable at all, must be left to the speakers of the language to be modified, just as the introduction of new technical terms which involve no change in its structural articulation is left to specialists Ordinary language is capable of enrichment in both directions, but it is obvious that to make any advance in the former direction involves, as its pre-requisite, a general advance in the habitual demand for accurate and subtle thinking on the part of a whole community. And even if there should be such a general advance it may not be found adequate to effect a structural modification of a language which has reached that stage of its development which we call maturity.

It is to promote the well-being of mankind at large, not of the greater number only as estimated by majorities, but of every individual who shall be born into the aggregate, so far as this depends upon what he is and feels and thinks and does; that is, upon his powers of self-knowledge and self-control, rather than upon the command he has over the forces of inanimate nature, or of any nature other than his own, that the Academical Sciences, now included, or to be included in the future, under our four Sections, are

ultimately directed. The harmonizing of the conscious actions of individuals by applying the lessons of the past, and leading individuals to see what purposes are desirable or the reverse in each department of knowledge, what are realizable and what illusory, is the ulterior aim of all: no definite fixed state of society, but a progressive interaction of all its members, recognized and promoted by all. Human nature is still *in fieri*, and the final issue of its history cannot be foreseen. But we may fairly hope that the foundation of the Academy will appreciably further the realization of this progressive interaction, which is the common though ulterior aim of the sciences of practice which it brings together into contact and collaboration.

What I have tried in the first place to show in this paper is, that the internal organization of the academical sciences, as I have ventured to call it, is no less essential to the realization of their common and ulterior aim than the corporate organization of their several devotees in an Academy. And in the next place I have attempted to indicate what, in my opinion, is the only possible way in which that internal organization can be effected, namely, by connecting the sciences of our first, second, and fourth Sections with those of our third, that is, with philosophy, which alone possesses in its metaphysical department a secure foundation for any science whatever, being itself founded, alone among all, upon the analysis of consciousness, or experience, without initial assumptions of any kind.

THE MEANING OF TELEOLOGY

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FELLOW OF THE ACADEMY

Read April 30, 1906

1. The point of principle to which I desire to call attention lies in the position adopted by more than one distinguished critic of Naturalism in maintaining the claims of Teleology against Mechanism and Epiphenomenalism. As I understand the matter, they rightly reject the analysis of the universe as a homogeneous system of quantity, the nature of the units in which can hardly be further defined. But if my understanding is correct in following them beyond this point, they rest the case of teleology within the universe exclusively on the capacity of finite consciousness for guidance and selection. They deny, as I gather, in principle that the supreme individuality, whose reality they are concerned to maintain, can manifest itself as plan and purpose through a nature which is the complement of mind, and by the operation of which the immanent idea can be conveyed to and moulded within the finite intelligence through processes which to that intelligence must appear as necessity, and even as mechanical necessity. If I read the tendency right, the reaction against mechanism is going near to destroy the idea of the reign of law, and to enthrone the finite subject as the guide and master of nature and history. If this is rightly read, I think we shall have to recall the mechanist, along with Spinoza, in the interests of the philosophy of history, and the theory of religion.

The view in which I find a difficulty seems to be present in two degrees. Either the realm of finite consciousness is taken to be coextensive with the organic kingdom, and to be responsible for introducing, along with life, a principle of guidance and construction unknown to the inorganic world, and accounting wholly and essentially for the teleological element in evolution and in history. Or again, the realm of finite consciousness is extended throughout the inorganic world itself, not merely as a possibility of fact, but as a means of accounting for the manifestation of design or harmony in actual nature through reactions which are falsely taken to be mechanical.

The distribution of mentality through the creation is a mere question of fact; but I am certain that no appeal to it can release us from the necessity of assuming a determinate outward side which characterizes the mind or will of separate beings, or can account for definite characteristics of the world from the subjective aspect alone.

In both these cases it looks to me as if an error of fundamental principle had been committed. I do not doubt that anything which ultimately can *be*, must be of the nature of mind or experience, and therefore that reality must ultimately be conceived in this manner. But to pass from this ultimate conviction to the idea that finite minds are the sole vehicles and determinants of teleology, apart from 'a nature'—a relatively external and mechanical system by which their content is defined and their individuality is moulded,—this seems to me as serious an error as that of the mechanistic view itself And I shall try to show that the misconception is deep-rooted in the double meaning of the term teleology.

2. I will state this point at once. It is admitted, I think, in principle, that teleology is an unlucky term. In the sense of aiming at the unfulfilled it gives an unreal importance to time, and to the part—it may be a relatively trivial part—which happens to come last in succession. Of the two implications of the term 'end'—completeness and conclusion—the latter, which is an accessory, usurps precedence over the former, which is fundamental. But in truth significance does not depend on what comes first or last, but on what there is in the individual real when it is apprehended in its completeness. Action is not truly teleological because in the time-process some deferred element of a partly given totality bids fair to be carried out through the desire of a finite consciousness. The end, in this sense, though *ex hypothesi* a *sine qua non* of the whole, would not necessarily be the main constituent of teleological value. The question of value would be independent of temporal relations, and would depend on the structure and significance of the whole in course of completion, that is, on its relation to the ultimate whole or individuality. The notion that the ideal belongs to the future is the enemy of all sane idealism; the ideal is what we can see of the whole, and the way in which it shapes the future for us is only an incident of our reading of past and present in their unity. Thus when 'purpose' merely means the fact that some finite consciousness is urged by some unfulfilled idea, there is in this, apart from the content of the idea, nothing specially sacred or significant. It is vain to look to the bare fact of conscious purpose for the essence or significance of teleology. Purpose only means, prima facie, that some one wants something. But.

omitting all other difficulties, does the something lose its value when he gets it? Does everything, then, derive its value from want? Is nothing good in itself, or as a fulfilled purpose? Surely we must take account of fruition and the character of perfection. An intuitive intelligence itself could only create a world in accordance with what that world must be and the laws by which its content is continuous and coherent. Things are not teleological because they are *de facto* purposed, but are necessary to be purposed because they are teleological. When we speak of the ultimate real as teleological or as individual, it is hazardous to say that purpose, in the sense of a craving unfulfilled in time, can play any part in our conception. Teleology which depends on a feature of the time-process is not a teleology which any one but a pragmatist can affirm of ultimate reality, and the lesson thus suggested is only enforced when we come to ask ourselves what is the true test, even for finite life, or for morals, of the purposiveness of a purpose. Subjective selection is very poor work, except in as far as it becomes more than subjective. Objectiveness of selection is the test of true purposiveness.

3. When this implication of teleology is reduced to its true level, we can go a step further as regards the relation of teleology to a mechanical system in the sense of a system governed by universal law. We may start from Lotze:—

The Absolute is no magician; it does not produce Things in appropriate places out of a sheer vacuum, merely because they correspond to the purport of its plan. All particular cases of its operation are based on a system of management according to law, adapted to its operation as a whole. But I must repeat: it is not here as it is with man, who cannot do otherwise; rather this uniformity with general principles is itself a part of what is designed to exist. Hence it is, that each stage in the development of organic life seems to arise step by step out of the reactions which are made necessary for the combined elements by their persistent nature, nor is there anywhere an exception to the dependence of Life on mechanical causes.

Starting from this view of mechanism, as thus suggested by Lotze[1], we may go on to suggest that his reservation ('it is not here as it is with man') seems untenable in principle. The popular distinction between a unique teleological whole or individuality, and groupings of similar points governed by a 'law' or rule of general application, possessed, we must believe, an undue importance for his mind.

It seems clear that a universal law does not, in its nature, imply a plurality of undifferentiated points of application—which is strictly a contradiction in terms—and that, on the contrary, every difference which can be instrumental within a whole to the realization of

[1] *Metaph.*, sect. 233, 277, and Introd. x, E. Tr.

teleology or individuality must inevitably constitute a term in a system of universal laws. For every true determination is true eternally, and so is universal in its inmost application, and in an individual whole the correlation of every difference with all others and with the whole itself must necessarily give rise to a system of true determinations [1], which are apt to be held distinct from universal laws only because of the current confusion between the universal and the general, which Lotze, perhaps, did not wholly escape [2].

A whole, whose differences had no nature—no identity—of their own [3], could not be intrinsically connected with them. For how can something be connected with nothing? Indeed, one does not see how the whole itself, being constituted by such differences, could be anything real or self-subsistent. If the predications which express the differences have no kinship with eternal truth, the whole can have no kinship with reality. Suppose, for example, that, charged with the execution of any plan or purpose, there were elements of miraculous capacities, to which nothing was forbidden in the way of transformation, self-annihilation, or new creation. Is it not plain that the content of the plan to be executed would require them either to define themselves and so cast off their omnipotence *ad hoc*, or to act as the hidden substratum out of which other elements, continuous and determinate *ad hoc*, should be generated in order to conform with the rational demands and context of the plan? Why continuous, it may be asked? why may not the plan demand transformation or re-creation of individual elements without ground as without limit? The answer is, as it seems to me, that plan involves determinateness, and determinateness continuity, and that in all directions. Everything must be followed by something—must be continued by something on every side, and between any two somethings within a unity there must be a determinate interconnexion, prescribed by the content of that unity. Miracle is incompatible with plan. I repeat, the consideration that every such interconnexion might be conceived as unique, the repetition of it being excluded by the individuality of the whole, does not in any way militate against its character of a universal law. On the contrary, such uniqueness is the true character of all

[1] Any rejoinder based on the supra-relational nature of the Absolute as such would, it seems to me, be irrelevant here. We are treating of a world in which teleological wholes and universal laws are supposed to be necessary alternatives, and I am only attempting to show that they are not alternatives but complementary aspects of reality, so far as appearing in such a world.

[2] See Introd x

[3] I do not say a nature other than relative to the whole; but in order to be relative it must *be*.

that is universal, a character which the commonplace conception of abstract generalization tends to obscure.

4. The problem may be developed by considering the relation of two positions respecting the nature of mechanism whose compatibility has been denied. The position (*a*) that nature is instrumental to the development of that which is of spiritual value is incompatible, it has been urged, with the position (*b*) that the spiritual view is that which regards experience as a mechanically intelligible whole

For, it is argued, the character of being 'mechanical' must either *ex vi termini* drop out the element of spiritual significance, or must at best refer to the analogy of actual machines, in which latter case, it is argued, the view criticized would involve taking the world to be intelligible as a true machine is intelligible. Now it is further urged that no true machine is a whole at all; it is a subordinate instrument in the execution of purposes imposed on it from without, requiring purposive action from without both to set it at work and to regulate its behaviour. In a word, whatever is a true machine, just because it is such, must be thought of as interacting, and that on terms of inferiority, with something which is not a machine.

The suggestion that *ex vi termini* mechanical intelligibility drops out all spiritual significance, is the precise position which I am here concerned to deny. It consists in the definition of mechanical by the exclusion of spiritual, a definition which at once, and necessarily, makes the spiritual as well as the mechanical partial and finite. How can it be said that there is nothing spiritual in the mechanical explanation of an arch or a tower? Would they be more spiritual if they had been magically created by 'The words that cleft Eildon Hills in three And bridled the Tweed with a curb of stone'? Surely, far less. The penetration by the law of all things, which is just the essence of spiritual inwardness, as of mechanical explanation, would then be wanting.

The second alternative put by the criticism makes the matter more obvious. A machine, we are told, essentially needs to be supplemented by purposive action, conveying purpose to it from without, outside its processes, in time, to set it at work, and acting on it 'from without,' i. e externally to its explicable system, by way of regulating it.

Now this is not merely saying that a mechanical way of understanding is an inadequate way of understanding, in as far as it imperfectly represents the whole of purpose or individuality It lays down a certain interpretation of this inadequacy, and this interpretation seems to be crude and erroneous. It depends on extending

the analogy of the supposed[1] relation of a clock or an engine to human purposes conveyed through human hands, to the whole mechanical appearance of the universe as compared with its purposive aspect. But it is obvious that here we have a *petitio principii.* The question is as to the mechanical appearance of the universe, and the human body, as interacting with things in space, is prima facie absolutely within this appearance, the question of interaction with a purposive being cannot possibly arise at the point where the hand touches the machine At that point there is nothing which is not most strictly mechanical. We have no experience nor know any appearance of any machine interacting with anything which in the interaction is not also a machine. Such interaction may be a deeper interpretation of appearances, but you cannot find it as a fact in the case of any bodily process. It is most remarkable that this simple truth is constantly forgotten. Thus, for example, in dealing with the utterance of mind through the fine arts, we constantly speak as if 'expression' came somehow straight from the soul, while mechanical finish was something different in kind. But in truth, of course, both are prima facie alike mechanical, and expression must mean a fuller mechanical control over the medium than what is termed *par excellence* mechanical execution. Mind and individuality, so far as finite, find their fullest expression as aspects of very complex and precisely determined mechanical systems. This is the law, I believe wholly without exception, for every higher product of human soul and intelligence, and also of cosmic evolution. The mechanical appearance must be granted to be universal and unbroken, though we may suppose it to depend on the nature of a system in which individuality is manifested through universal law. Having now, after the argument of section 2, no need to restrict teleology to the realm of finite purpose, we can freely suppose the world-plan to be immanent in the whole, including finite mind and also mechanical nature, the obviously secondary and fragmentary being of the former constituting a partial revelation of the meaning of things, but by no means its principal vehicle or the sole organ of guidance in evolution or in history The point here maintained against the critic depends on the continuity of mechanism with the individuality of the real, in virtue of that deeper aspect of the latter, which is logical rather than teleological. This is why, admitting a certain inadequacy in the mechanical view as commonly understood, we still contend that the true spiritual ideal demands mechanical intelligibility.

[1] 'Supposed,' because the relation of mechanism to intelligence is the point at issue.

5 We may now approach a positive result and first take for illustration the case of a beautiful flower. Our view excludes two extremes On the one hand, it is ridiculous to say that such a product arises by accident, that is, as a by-product of the interaction of elements in whose nature and general laws of combination no such result is immanent, as if in some way these were simpler substances and laws more real and fundamental in the universe, and as though we were dealing with the insight of a human workman, by which the more complex developments were not anticipated or reckoned for. It is impossible in this way to treat part of the world as primary and part as a secondary superstructure We must interpret the nature of nature as much by the flower as by the law of gravitation. If we come to that, there are appearances, which we cannot on any sound principle refuse to call teleological, in the most direct and simple reactions of mechanism. The motions of the solar system, the curl of a wave, the form of a precipice, are appearances deeply rooted in the simplest physical data, and yet, for all we can see, as well meriting teleological interest, as anything else in the works of God or of man.

On the other hand, we must not say that 'purpose is active' in the flower, if that is to mean that we ascribe it to an end or idea, somehow superinduced upon the routine course of the elements by a power comparable to finite consciousness, operating, as it were, in a vacuum. If the former spelt 'accident,' this spells 'miracle.'

We have seen that teleology is destroyed if no determinate relations between the differences of the unity can be truly predicated. As Lotze has told us, you can find no point at which life is not mechanically conditioned. Thus the beautiful individuality of the flower really forces on us a conclusion which goes so far that the case of human consciousness, though appearing so widely different in degree, can hardly carry us further in principle. Avoiding the two extremes just pointed out, we are driven to affirm that in the structure and being of the flower the common natural elements behave according to their different relations, and that the wonderful creation we behold is simply the immanent development of certain factors which, no doubt, in their isolation, seem far enough removed from anything of the kind. We have, indeed, to bear in mind that the environment—the objective selection of the world—has been active; it is not in a few 'elements' as laid side by side in the laboratory, but only in the whole interactions of nature, that the plan of the flower has been immanent. Still our wonder remains, for, granting that we are not bound to deduce the flower directly from the inorganic elements, yet at any moment such a material substance

as the seed of a plant must be said to contain[1] an individuality shut up in a strictly mechanical arrangement I venture to urge that here we are not relying on any point which can be disputed on metaphysical ground, we are not attempting to show that or how Nature aims at ends, we are insisting on what seems to us a pure matter of fact, viz. that in a seed or in a flower you have a wonderful thing, a thing decisively partaking of individuality, definitely and plainly constituted[2] by arrangements of material substances and their reactions according to law. In this case the suggestion of miraculous intervention of a finite consciousness, which would meet us when we appeal to the embodiment of mind in artificial machines or in works of aesthetic expression, would hardly find an advocate We know, roughly speaking, the history of flower development, about as well as we know that of any natural process whatever. And moreover, any such suggestion has in my view been wholly put out of court by the examination to which we have subjected the correlative conceptions of mechanism and teleology. The idea that when a man constructs a clock, or composes a sonata, you have a purposive intelligence operating by the bare form of design on a system which thus receives something that cannot be communicated by the reaction of mechanical parts on one another, should now appear to be a contradiction in terms. No one would think, to-day, of accounting for the flower by an explanation of that kind—say, by the purposive interposition of a creative intelligence, and whether or no Nature can aim at ends, it is mere fact that she can present them to our minds.

Thus we have partly seen, and we may now further see, that the foundations of teleology in the universe are far too deeply laid to be accounted for by, still less restricted to, the intervention of finite consciousness. Everything goes to show that such consciousness should not be regarded as the source of teleology, but as itself a manifestation, falling within wider manifestations, of the immanent individuality of the real. It is not teleological because, as a finite subject of desire and volition, it is 'purposive' It is what we call 'purposive' because reality is individual and teleological, and manifests this character partly in finite intelligence, partly in appearances

[1] The further conditions here—those which are necessary to the flower but cannot change it into anything else—must in fairness be treated as conditions only.

[2] Of course the percipient consciousness has to be allowed for, and for ultimate significance this is important But for the question how grades of appearances are connected with each other, which I am now discussing, the percipient consciousness, being a common factor throughout, ought, as it seems to me, to be dismissed.

of a far greater range and scope. The large-scale patterns of history and civilization are not to be found as purposes within any single finite consciousness, the definite continuity and correlation of particular intelligent activities, on which the teleological character of human life ultimately depends—the 'ways of Providence'—are a fact on the whole of the same order as the development of the solar system or the appearance of life upon the surface of the earth. It is impossible to attribute to finite consciousness the whole development which springs from the linked action of separate and successive finite consciousnesses in view of the environment. Every step, though in itself intelligent, is in relation to the whole unconscious, and the result is a 'nature,' though a second and higher nature. This principle is all important, and holds throughout all levels of being. I am content to stake my whole contention upon it, and if it can be overthrown, or if I have misconceived the attitude of anti-naturalist writers to it, I shall be most eager to be set right. Man's intelligence, as I understand the matter, presupposes and does not on the whole sustain, his bodily life. To say that all vital responses have been inherited from volitional or quasi-volitional behaviour is to my mind doubtful in fact, but in any case an evasion of the point of principle. In the first place, if something analogous to volition moulded the structures of our body in earlier phases of life, it never moulded them by any conscious wisdom of its own; it followed, almost blindly, the determinings of a deeper wisdom, which lay hidden in the general structure of the environment. The denial of teleological significance to natural selection is typical of the contention which I am arguing against.

In the second place, whatever mind may have done in the past for our bodily structures and responses, this cannot come into court when we ask what part it plays to-day. Man's mind and purposes presuppose, accept, and are founded on his actual body; the plant mind, if there be one, presupposes and accepts the plant-form Say here, as was said of man, that mind is present from the beginning; still it is present in forms so elementary that they must, on the whole, be moulded rather than mould. The orchid could have no mind that could contrive its fertilization, any more than man has a mind which could teach him to swallow or to digest, or could choose the place or century of his birth.

Everywhere finite consciousness makes its appearance, so far as this is obvious and unmistakable, at a relatively high level, focussing and revealing the significance of a huge complication of mute history and circumstances behind it and surrounding it. If ambiguous in bio-

logical evolution, where the facts are hard to know and interpret, the principle is clear and unambiguous in history. It is not finite consciousness that has planned the great phases of civilization, which are achieved by the linking together of the achievements of finite consciousnesses. Each separate intelligence reaches but a very little way, and relatively to the whole of a movement must count as unconscious. You may say there is intelligence in every step of the connexion; but you cannot claim as a design of finite intelligence what never presented itself in that character to any single mind. The leader of a Greek colony to Ionia in the eighth or ninth century B.C. was certainly paving the way for Christianity, but his relation to it, though much more in degree, was not essentially different in kind from that of a coral insect to a coral reef. Christianity and the coral reef alike were never any design of men or of insects; they lay deeper in the roots of things, and this, as I hold, really carries with it the question of principle about evolution. Nothing is properly due to mind, which never was a plan before a mind.

The contrast, then, of mechanism with teleology, is not to be treated as if elucidated at one blow by the antithesis of purposive consciousness, and the reactions of part on part. It is rooted in the very nature of totality, which it regards from two complementary points of view, as an individual whole, and as constituted of inter-reacting members. Of the two points of view, it is impossible for either to be entirely absent. Assuming this impossibility to be possible, a total failure of mechanical intelligibility would reduce the spiritual to the miraculous, and destroy teleology, as a total failure of teleological intelligibility would reduce individuality to incoherence, and annihilate mechanism. But teleology, being usually thought of *par excellence* or in abstraction, may more easily be supposed absent than mechanism, which must attend any inter-relation at all. 'Understanding without reason is something, reason without understanding is nothing.'

The entire doctrine of theism in the Kantian sense as involving a personal creator and governor of the world, and with it the paramount importance of subjective selection and bare finite consciousness as causes in the universe, in contrast with natural selection and the immanent plan of things—is here called in question, though another and a deeper importance might attach itself, as has been indicated, to finite consciousness from a wholly different point of view. The meeting of extremes in metaphysics is not a thing that should surprise us, and the polemic against the mechanical view of the universe and the epiphenomenal doctrine of intelligence may

find these conceptions falling back upon an alliance unexpected alike to themselves and to their antagonist. In these suggestions, we are entirely discarding the actual context and contentions of recent psychological epiphenomenalism. But the name 'epiphenomenalism' seems to suggest a significance which has not usually been given it. I do not mean to treat consciousness or the self as a 'by-product' or an accessory, but it is becoming more and more essential to regard them—the developed finite mind—as 'on the top' of a great deal that must go before it. Two opposing contentions seem to demand fusion. It must be admitted to the voluntarist that a vast underground work is involved in the formation of an intelligent moral being. The conscious self is surely the last word of an immense evolution which is practically and relatively from unconsciousness to consciousness, and presupposes, necessarily presupposes so far as we can understand, the co-operation of unconscious nature in moulding the foundation of mind. I see no logical value whatever in assuming the presence of mind in simpler forms at earlier phases. But to maintain this is, on the other hand, to enhance and not to minimize the power and significance of intelligence, which comes as the climax and revelation when the underground self emerges into relative completeness. Only, when clear consciousness comes, it does not come empty or without presuppositions; it comes in possession of a content and a mechanism which its world has prepared for it. This does not make it a less significant but a more significant utterance of the real, if we look at the matter rightly. Yet, we must understand that bare consciousness and the bare power of selection are nothing, and account for nothing.

The similarity between the net result of these ideas, and the deepest conclusions of religious philosophy, cannot fail to attract our attention. That on the whole the finite intelligent being has the duty and position rather of coming to himself and awakening to his own nature and his unity with what we call, by an imperfect analogy, a greater mind and will, than in controlling the course of the universe or moulding it as an independent cause—this is a point of view which seems to demand reaffirmation. At least it is suggestive as against claims which largely spring from making absolute the attitude of individualistic moralism, and has, I think, been divined with a Spinozistic enthusiasm, though not adequately expressed, by some of the scientific leaders whose inadequate mechanical theory is the legitimate prey of recent philosophical criticism.

THE PROBLEM OF SPELLING REFORM

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Read May 2, 1906

I suppose I may assume that the British Academy will at all times be ready to consider questions that relate to general education, and I am personally of opinion that there are few subjects of general interest and importance that are more deserving of attention than the often debated one of Phonetic Spelling. I do not propose to waste the time of those who are so kind as to listen to me, by stating or recommending any views that I have formed for myself, during the many years in which this subject has never been far from my thoughts, my object is rather to review the present state of the question, and to consider what progress, if any, has been made in the direction of its solution.

Notwithstanding all that has been said and written upon the subject during the past forty years, I fear it must be admitted that we are still in very much the same position as we were at the beginning of the discussion, at any rate, as far as relates to the attainment of any practical results in this country. But as regards the theory of it, something has been achieved. The labours of Dr. Ellis and Dr. Sweet have by no means been lost, and, in order to see what advances have been made, a slight sketch of the history of the movement may prove useful.

When it was first proposed to improve our modern system of spelling, it soon dawned upon all serious enquirers that the first step was to examine the meaning of the symbols which we employ for the purpose of representing the spoken language. There was a difficulty at the very outset; for the first impression which the very look of the written language is apt to produce—the impression, indeed, which it actually produces upon the minds of a vast multitude amongst us—is that the whole matter is inexplicable, and is not likely to be capable of explanation. I remember very well, for example, meeting with a passage in the works of so popular an author as Bulwer Lytton

(I have unfortunately lost the reference) in which modern English spelling is frankly declared to have been the invention of the devil; because it is unlikely that any other being could have hit upon a system which, to all appearances, is so chaotic, so inconsistent, and so contradictory in many instances to all common sense. Of course this opinion was not meant to be taken seriously, but it fairly represents a very general conviction, viz. that the whole system is so capricious as to be likely to defy any general comprehension of it. And it is only right to admit that, before we can undertake to correct our spelling with any prospect of sufficient success, we must first of all endeavour to understand and to explain it as it is.

The right objection to make against Bulwer Lytton's sweeping allegation is to say that it is unscientific. For, after all, spelling is a merely human contrivance, and must be capable of explanation by historical methods. It may be a laborious business to explain the modern spelling of every English word, but of course it can be done; and perhaps it is hardly necessary to add that, as a matter of fact, the history of every verbal form is being regularly recorded in the *New English Dictionary*, in which it is proved, beyond all doubt, that the whole problem admits of a complete and exact solution, and is such as can, in most instances, be easily understood by experts.

In order to be an expert in this matter, it is necessary to study not merely the history of the written forms, but also that of the sounds which such forms were intended to represent. This is at the bottom of the whole question, and until it was apprehended that such is really the case, no real progress was possible, and therefore none was made. All that could be done was to note a few unwarrantable caprices which a very little experience could easily correct. I take as an easy case the curious craze that was fashionable in the seventeenth century of writing *sc* for *s* before *i*, or sometimes before *e*, at the beginning of a word. This was of course due to the fact that there is a silent *c* in the initial *sc* of the French word *science*; so that it became 'scientific' to extend this system of spelling words to other cases. John Ray, in his *Note on the Errors of our Alphabet*, makes particular mention of this in 1691. He says —'I might also note many false spellings in particular words, as . . . *scituate* for *situate*, which is but lately come up, and hath no appearance of reason, the Latine word being *situs*, without any *c*. *Scent* for *sent*, signifying a smell or savour, which writing is also but lately introduced, and hath no more ground than the former, the Latin word from whence it comes being *sentio*.'

We are now happily rid of the form *scituate*, but *scent* is still with

us. Not only so, but modern English still clings, senselessly, to several other forms that are equally ridiculous and indefensible Take for example the word *scythe*, which appears in Shakespeare's Plays as *sythe* (Hen. V. v. 2. 50, L. L. L. i. 1. 6, Ant. iii. 13. 194), and in his Sonnets as *sicth* or *syeth* (Son. 12, 60, 100, 123). It is true that Richardson quotes the modern spelling *scythe* from Shakespeare's Lover's Complaint, but the quotation lies open to two objections. One is, that many of us doubt whether Shakespeare wrote that particular poem, and the other is, that a reference to the beautiful facsimile edition lately published by the Oxford Press shows that Richardson was mistaken, the form which appears there is *sithed* (l. 12), which is meant for a past participle, with the sense of 'mown'[1].

Another monstrosity is *scion*, a spelling which also appears in modern French, a language whose spelling, like our own, abounds with inconsistencies. But Cotgrave's *French Dictionary* gives the alternative spelling *sion*, and the Old French had the form *cion* Whether it is really allied to the French *scier*, to saw, to cut, is now much doubted, but even that would not help it out; for there is no *c* in the Old French *sier*, which is derived from the Latin *secare*, to cut, with a total disappearance of the guttural consonant, just as in the French *nier* from the Latin *negare*.

And finally I may instance the extraordinary form *scissors*, which simulates a derivation from the Latin *scindere*; though the old spelling *cisours* connects it with the French *ciseau* and the English *chisel*; from the Latin *caedere*, to cut.

But the chief point which we must always bear in mind is really this; that the mere observation of old forms will not carry us far, unless we can succeed at the same time in realizing how those old forms were pronounced. This is the one fruitful idea which has taught us so much, has established modern etymology on so firm a basis, and has led to so great an advance in the philology of various languages. It is the one lesson which is essential, and is nevertheless realized by very few of us. We all need to recall to our minds, from time to time, the elementary fact that all languages are essentially *spoken* languages, and that the written words are mere symbols, employed to represent real spoken sounds, and sometimes performing their office in a very slovenly and unsatisfactory manner. For indeed, the spoken forms change slowly from one generation to another, yet so imperceptibly that the necessary accompanying changes in the written forms are not kept up to date, but frequently remain un-

[1] 'Time had not sithed all that youth begun.'

changed for centuries, until such propriety as they once possessed has gradually faded out of them. The most extraordinary example of this truth is obvious in the case of Latin. The old pronunciation of Latin is sufficiently well known to scholars, but is now very lightly regarded, and nowhere more lightly than in England. The Italians have, for the most part, preserved the vocalic sounds and many of the consonants, by the nature of the case; but I fear that many of them pronounce Latin as if it were mere modern Italian, and take no further pains about it. The Germans have a tendency to pronounce it as German, but probably do more justice to the right sounds than others do. Spaniards are apt to confuse it with Spanish, and Frenchmen with French. But however this may be, what most concerns us is the treatment of Latin in England. It seems to have escaped the observation of many that there was a time in England when Latin pronunciation was not far wrong. To this day the Latin *c* is pronounced like *k* in Wales, even before *e* and *i*; as in such common words as *ceffyl*, a horse, allied to *caballus*, and *ci*, a dog, allied to *canis*. The same sound was so universal in England before the Conquest that the letter *k* was but seldom used, as being hardly wanted. The Roman *Cantium* has become the English *Kent*; but it is a most interesting fact that the almost universal spelling of *Kent* in Anglo-Saxon MSS. is *Cent*, with a *C*. The Anglo-Saxon vowels were denoted by Latin symbols, precisely because they were sounded like the Roman vowels, as in the famous word *wīn* (pronounced as E. *ween*) from the Latin *uinum*, which even preserves the right initial consonant to this day, though the modern form is *wine*. In Chaucer's time, Latin was still pronounced as English, and yet pronounced reasonably well, because the vowel-sounds were then but little changed. But as from time to time the sounds of English altered, Latin was still sounded as English, and suffered precisely the same changes, and this is really the reason why many people believe that Latin is quite properly pronounced when it is pronounced like the English of the present day. They forget how much has happened since the days of Alfred. They still say *Kent* for the form which we once wrote *Cent*, but they no longer say *kentum* for the form which we still write *centum*.

I suspect this to be at the bottom of the whole trouble. My memory goes back to the time when it was a matter of common belief that the sounds which we employ in speaking English have *never altered!* Indeed, this was quite a logical conclusion; for if it be correct to pronounce Latin like modern English, it must follow that we must also pronounce Anglo-Saxon after the same fashion,

since it employed the same alphabet as the Latin and apparently used the same symbols in the same way. In such a belief I was accordingly brought up, and in this benighted state I remained until Dr. Ellis, in 1869, brought out the first part of his great work on Early English Pronunciation, with especial reference to Shakespeare and Chaucer. He began by showing that the question of our pronunciation was actually discussed by many writers of the sixteenth, seventeenth, and eighteenth centuries, and that it was impossible to reconcile their statements with the present state of things. And when once the old belief as to the stability of our vowel-sounds had thus been shattered, the whole position was changed, and all that remained—though this was a large remainder—was to ascertain what was the nature of the sound-changes, and to fix convenient dates at which the sounds employed could be most usefully investigated. The chief result of Dr. Ellis's work was to show that the question of Elizabethan pronunciation offers great difficulties, but that, as we recede from the present date, such difficulties readily decrease. The question as to the Chaucerian pronunciation is much simpler, and we are very much helped in this matter by the extremely careful and almost rigid exactitude which was observed both by Gower and Chaucer in their methods of riming. The older MSS. of the thirteenth century are even clearer, as a rule, in their mode of denoting vowel-sounds; though we also come across MSS. which were evidently the work of some Norman scribe who experienced much difficulty in struggling with sounds so strange to him as the English *th* and *sh* and *wh*. As for the *wh*, the Normans successfully persuaded the inhabitants of Southern England to exchange it for *w*; and at the same time to neglect the guttural sound which they were willing to represent by *gh*, though they declined to pronounce it themselves. When we get back to still earlier times, viz. to the period before the Norman Conquest, the problem is still further simplified, we find that, as regards the vowel-sounds, we are dealing with symbols such as are still in use in Italy, and that we have, in fact, got back to the time when Latin was pronounced as English, and at the same time pronounced correctly.

If we turn to p. 534 of Dr. Ellis's work, we find that his conclusions as to Anglo-Saxon pronunciation do not differ materially from those which had already been put forward by Rask, the Danish scholar, as far back as 1817, though very little attention was paid by us to Rask's teaching before 1830, when an English translation of his Grammar, originally written in Danish, was printed at Copenhagen, the translation being the work of Benjamin Thorpe. Perhaps the

earliest book printed in London in which Rask's results were made generally accessible was Vernon's *Anglo-Saxon Guide*, printed by J. Russell Smith in 1850, a book which remains a good one to the present day, though it has been superseded for general use by Dr Sweet's well-known *Anglo-Saxon Primer*.

Later than this monumental work by Dr. Ellis, we have the important *History of English Sounds from the earliest period, with full word-lists*, published by Dr. Sweet in 1888. In this the order of investigation is very properly reversed. Dr. Ellis traces the history of our sounds backwards, from the sounds of modern English to those of Anglo-Saxon. Dr. Sweet was thus enabled to exhibit the development of our sounds in their historical order, beginning with Anglo-Saxon times, and tracing the changes introduced during the various periods which he calls the Middle English period and the First, Second and Third Modern periods, the last of which brings us down to the nineteenth century. Two other books by Dr. Sweet also deserve mention in the present connexion. These are his *First Middle English Primer*, which discusses the pronunciation of the *Ormulum* and the *Ancren Riwle* near the beginning of the thirteenth century, and his *Second Middle English Primer*, which discusses the pronunciation of Chaucer

Besides these works, we are fortunate in possessing an excellent treatise on the development of what has been not very happily termed Lowland Scotch, though it would have been better to have termed it Northumbrian English. I refer to *The Dialect of the Southern Counties of Scotland*, by Dr Murray; published by the Philological Society in 1870–2. It will be observed that he is careful to avoid the more usual name.

I have given these details because they are essential to the history of spelling reform. The intelligent examination of the older forms of words soon showed that not merely their sounds, but the spellings which denoted those sounds, have changed from time to time, and further—which is much to the point—that many changes made in spelling were made from a phonetic point of view, the intention being, in such cases, to get a better representation of the sounds that were intended to be suggested. In days when there was no fixed standard, many such attempts were unintelligent and unworthy of serious regard, but we also come across manuscripts, such as the celebrated autograph copy of the *Ormulum* and the Ellesmere MS. of Chaucer, in which symbols are employed with great regularity, so that much can be learnt from them. Dr. Sweet's *History of English Sounds* contains two valuable word-lists. The first of these contains

four columns. Of these, the first shows the A.-S. written form, the second, the Middle English written form, the third, the modern English written form, and the fourth, the modern English *spoken* form, as expressed by a special phonetic notation invented for the purpose For example, the word *great* gives us (1) A.-S. *grēat*; (2) Middle English *grǽt* or *greet*, (3) mod. E. *great*, (4) the modern sound, expressed in phonetic spelling as *greit*. The fact is, accordingly, that so far from the idea of phonetic spelling being modern, it is extremely old. For it is obvious that those who first undertook to reduce sounds to writing could not possibly have taken as their guide any other standard than the sound of the spoken utterance. The notion of unphonetic spelling, i. e. of spelling a word one way and pronouncing it another, has grown upon us unawares, merely because we have been too lazy or too indifferent to reform our spelling from time to time with sufficient frequency. The most probable reason for this is the unpleasant fact that many of the most violent or most sudden changes in the spoken language have taken place in comparatively recent times, when the appearance of the printed forms had become familiar to many readers, and the required alterations would have been resisted by the printers and disliked by many who, having learnt to read already, had no particular regard to the convenience or edification of a coming generation.

The very word *great*, already referred to, affords an excellent illustration. The A.-S. form *grēat* was purely phonetic. The *gr* was followed by a diphthong expressed by *ēa*, i. e. the former element was a long *ē*, probably an open *e* resembling the modern English *a* in *Mary*, immediately followed by a short *a* like the Italian short *a* in the first and last syllables of *amata*. But in Early Middle English the diphthong became a vowel, by the gradual diminution and neglect of the latter element, so that we find in the *Ormulum* the spelling *græt*, with two dashes or slanting strokes above the *æ*, to call attention to its length. The use of the *æ* was to denote that the *e* was open, the close *e* being written as *e*. Then came the most important spelling reform in the whole history of our language, when it was completely respelt by Norman scribes upon French models, chiefly during the reigns of Edward I and Edward II. These scribes were unused to the A.-S. symbol *æ*, and took the unwise step of abolishing it, with the result that they had but one symbol, viz. *ee*, to denote the long sound of *e*, which was used, *without distinction*, for both the close and open varieties of the vowel-sound. The consequence was that the spelling of the word was Normanised into the form *greet*, as in the Ellesmere MS. of Chaucer. If this adjective was used in the

plural, it was common to write *grete* instead of *greete*, as it was supposed that the length of the vowel was thus sufficiently indicated. But at the very same date we meet with a duplicate form *grete* in which the *e* was close, the sense of which was 'I greet', and this ambiguous state of things became at last intolerable. For indeed both sounds were unstable, and subject to continuous slight changes. Of all our long vowels, the long close *e* seems to have been the first to approach its modern English value, with the natural result of creating confusion throughout the whole scheme, and a general diminution in the phonetic values of the symbols. Already, about the year 1500, when we enter upon what is now generally called the modern period, as distinguished from late Middle English, it would appear that the words *great* and *greet*, though still spelt alike, viz. 'greet,' had approached more nearly to their modern values, with a very distinct and easily apprehended difference in their sounds. About this time a new spelling reform set in, viz. (1) to restrict the use of *ee* to the cases in which the ē was originally close and was now approaching the sound of the modern E. *i* in *machine*, and (2) to use the symbol *ea* for the sound developed from the open ē. Already in Palsgrave (1530) and Tyndale we find *great* as a usual spelling; and from this time forwards we find the sounds resulting from the two varieties of the M. E. ē fairly well distinguished in writing. In the time of Pope, it is well known that we find *tea* to represent what we should now spell *tay*; and a similar pronunciation is still heard in Ireland. But about the year 1800 the pronunciation of *tea* as *tay* became archaic, and the sounds which had been distinguished for so many centuries at last began to approach one another, and at the present day (except in a few instances) are precisely alike. The chief exceptions are two, viz. *great* and *break*. for although there was at one time a tendency to change these along with all the rest, and a few people pronounced these words as if they were spelt *greet* and *breek*, these sounds did not prevail, and are now very rarely heard except in the dialects of about fourteen counties. The reason for this curious anomaly is doubtless, as Dr. Sweet points out, that in both cases the diphthong (phonetically denoted by *ei*[1]) is preceded by an *r* that is further strengthened by a preceding consonant. For it is a fact that the sound of *r* frequently affects a neighbouring vowel.

From the above account it naturally follows that the present habit of pretending to make a difference between *ea* and *ee* is an obsolete absurdity. We may, indeed, usually conclude from the modern

[1] i. e. the *ei* in 'vein.'

spelling that such words as *deal*, and *clean*, and *heat*, were pronounced in the days of James II as if they were now spelt *dale* and *clane* and *hate*, i. e. as they are still pronounced by many in Ireland, but this has nothing to do with modern literary usage, and we should all be gainers if we abolished a now useless distinction, and spelt these words with double *e*, in conformity with the rest. Such spellings as *deel*, *cleen*, and *heet* would be perfectly intelligible at the first glance to any child who can read at all, whilst we might retain *break* and *great* for the present.

I here purposely take occasion to consider an objection which is frequently raised by such as do not understand the true object of spelling. The moment that we propose to write *cleen* for *clean*, in accordance with common usage, up jumps the objector who has been lying in wait for this very opportunity, and says —'Then you would actually propose to represent the mighty ocean by such a spelling as *see*! How then shall we be able to distinguish it from the verb *to see*?' The triumph with which this supposed 'poser' is put is almost piteous to witness, for it shows but a very limited acquaintance with the English language. The answer is —'In the same way as you distinguish *ball*, a dance, from *ball*, a sphere, or between a *bark* that is a ship, and the *bark* of a dog; or between the hundreds of other homonyms that fill twenty pages, in double columns, of my *Etymological English Dictionary*. It is the spoken language, once more, that alone matters, and there is always a context. If two such words as *sea* and *see* require to have different spellings, how is it that they do *not* require to have different pronunciations?' It is the old mistake of supposing that an object seen imperfectly in a mirror is more original and valuable than the object itself.

In consequence of the results as to the history of English sounds that had thus been obtained by Dr Ellis and Dr. Sweet, it was no wonder that it occurred to the Philological Society, with whom they were so closely connected, to consider the whole question of Spelling Reform afresh; and it did not take very long before the following results were obtained.

1. The best scheme of all would be one in which the symbols would be referred to their original values; or, in other words, in which the vowel-symbols, in particular, should be used as they are now used in Italy and were used of old by the Romans from whom we borrowed our alphabet at a very early date. At the same time, it would be advisable to adopt new symbols for such simple sounds as *th* and *sh*, which are now somewhat clumsily denoted by combinations. That such a scheme is eminently practicable is fully demon-

strated by its use by Dr. Wright in compiling his *English Dialect Grammar*. For it is obvious that a scheme which is capable of representing all the pronunciations found in all our English dialects must be capable, inclusively, of representing all the sounds heard in the literary language only.

2. It may be admitted that there are two practical objections to this course; one is that it requires a certain amount of new type, and the other that the English people, speaking generally, are so hopelessly ignorant of phonetic principles that they are incapable of understanding symbols used with their true value. Even those who admit that they pronounce the *i* in *machine* like the *ee* in *meet* are usually incapable of applying such a principle generally, so that if one were to denote the word *meet* by the form *mīt* (or *miit*) they would still argue that this last form *must* be pronounced as *mite*.

3. We are thus led to consider the question anew. Suppose we retain, as far as they are suitable, the present symbols, can anything be done to reduce the present state of chaos to something that more nearly resembles a state of decent order?

This question was considered by Dr. Sweet in all seriousness. A paper which he wrote with the title of 'Partial Corections of English Spellings aproovd of by the Philological Society, 1881' appeared in the Supplement to the Transactions of the Philological Society for 1880–1; and, though it occupies but thirty-eight pages, it is extremely clear and full, and contains a list of a large number of representative words which undoubtedly admit of very considerable improvement. This is, in fact, an initiative instalment of Spelling Reform such as we should be very fortunate to obtain; for it is a great improvement upon our present usage, and is carried out on perfectly consistent and sane principles.

By way of example, I here note a few simple cases in which our spelling might be improved, all of which are duly noted by Dr. Sweet.

1. The first is the abolition of the silent final *e* in cases where it is useless. There is an extremely silly habit of never allowing *v* to stand at the end of a word. Such is our conservatism that the origin of the habit dates from the time when the sound of *v* was denoted by *u*, and when the *u* was always followed by an *e*, or at any rate by a vowel, in order to show that *v* (and not *u*) was the sound intended. When the old form *haue* became *have*, the final *e* performed no function, and should have been dropped. We ought accordingly to have no hesitation in writing *hav*, *giv*, *abuv*, *cum*, and the like. We could then distinguish *liv* from *live* (with long *i*). We could further extend this dropping of *e* to words like *agreev*, *aproov*,

solv, *adz*, *freez*, and many others. *Awe* may be reduced to *aw*, and *axe* to *ax*. It is interesting to know that the final *e* in *ax(e)* is unjustifiable by etymology, as is duly pointed out in the *New English Dictionary*. To write *axe* is due to mere caprice, especially when we write *ox* instead of the Mid. Eng. *oxe*, in which the final *e* was really syllabic and so had once a meaning.

2. In a large number of words ending in *-le*, the final *e* is quite needless; we can easily tell how to pronounce such forms as *assembl*, *litl*, *dubl*, *beetl*, *ievl*, *promis*, *definit*, *activ*, *handsum*, *therefor*. It is also better to drop the *e*, even when not final, in words like *drivn*, *writn*; and similarly to drop the *o* in *butn*.

3. The use of *ea* to denote the sound of short *e* is absurd and troublesome. We should certainly write *bredth*, *medow*, *brekfast*, *hed*; with a great many more. For *heart* we should write *hart*. The use of *eo* for *e* in *jeopardy* and *leopard* should certainly be given up. The word 'people' is represented in Dr. Sweet's scheme by *pepl*. An alternative form is *peepl*, which would be more consistent with other amended forms

4 The use of *ie* for *ee* is unhistorical, and should be discontinued. Examples are :—*acheev*, *beleev*, *cheef*, *feeld*, *seege*. *Sieve*, like *sift*, was once spelt with simple *i*, so that *siv* is absolutely correct. I may here observe that Dr. Sweet omits to notice the *ei* in *receive*; yet this is equally useless; we really say *receev*, *deceev*.

5. The Tudor form *oo* should be restored in words like *improov*, *looz*, *moov*.

6. The original Old Norman *u* in such a word as *cumfort* was turned into *o* by the later Norman scribes merely because *um* was indistinct in manuscripts; on which account they wrote *comfort* for the greater distinctness; i. e. they used *o* for short *u* before *m* and *n* and *u*, as in *comfort*, *monk*, *money*, *cover* (formerly *couer*). But modern printing is clear enough to admit of the restoration of original forms; such as *cumfort*, *cumpany*, *cum*, *munk*, *muney*, *cuver*.

7. In many words *ou* is written where the modern short *u* is meant. We should therefore write *burgeon*, *curage*, *cuzin*, *flurish*, *jurney*, *ruf*, *tuch*. So also in words ending in *our*, it suffices to write *or*, as in *labor*, *honor*, *harbor*.

It is difficult to understand the position of those who defend such a spelling as *labour*. They pretend that it is etymological, as it certainly was *once*, when the word was accented on the latter syllable, but it ceased to be so about 400 years ago, when the accent was thrown back upon the former syllable. They also conveniently forget that the change from final *-our* to *-or* has already been silently

made in several words, such as *emperour*, *horrour*, *terrour*, *errour*, *mirrour*, *jurour*, *confissour*, *cisours* (now spelt *scissors*), and others. The objectors would be equally shocked to see the old spelling restored in these words, which shows that they are inconsistent and insincere. Another favourite argument, quite as untrue as it is unpolite, is to call the form *labor* 'American'; for the spelling *laborer* (for *labourer*), in six MSS. out of seven, in Chaucer's Knightes Tale (A 1409) clearly shows that our ancestors knew how to represent the *-our-* of an unaccented syllable before Columbus was born.

8. The final *ue* in *decalog(ue)*, *demagog(ue)*, and the like is useless and modern; but may be retained in *fatigue* and *vague*, where a strong stress immediately precedes it.

9. The doubling of consonants is often unnecessary. Such forms as *ad*, *eg*, *od*, *bailif*, *buz*, *ful*, *stif*, are quite intelligible. So also in *batl*, *ketl*, *wrigl*, *writn*, *traveler*.

In many words, the doubled letter is unhistorical and unetymological, as, e g., in *arrive*, from the Old French *ariver*. We should do better to write *arive*, *adrés*, *ajust*, *aquit*, *afair*, *atak*, *comand*. Few people who look at the form *affair* would guess that it simply resulted from the French phrase *à faire*. The double *m* in *commence*, from O.F. *comencer* (Ital. *cominciare*), is ignorant and ludicrous.

10. It was by an unintelligent trick, at the time of the Renaissance, that an unoriginal *b* was thrust into *debt* both in French and English. The French have now got rid of it, but John Bull clings firmly to his *debt*. It is simpler, as well as more correct, to write *det*, *detter*. The final *b* is useless in *lamb*, *limb*, *numb*, *thumb*. So also *plummer* is better than *plumber*, and is so spelt when used as a surname.

11. Some words have gone quite wrong; we actually use *ache* for *ake*, and the old spelling of *anchor* was *anker*. As to *choir* and *quire*, the latter form alone denotes the sound, and should be preferred.

12. An *e* is often needless when a word ends in *-ed*; as in *pulled*, which might be reduced to *puld*. There is no more objection to be raised against *lookt* or *slipt* than there is against *spilt* or *left*.

I have not noticed all the points which Dr. Sweet discusses, but the above are sufficient to show how much might be done to make our spelling more phonetic. The usual outcry as to the loss which such improvements would cause to the cause of etymology is, for the most part, as false as it is insincere. It is only raised for the sake of hindrance, and every etymologist who has investigated the question fairly and without prejudice, and is sufficiently familiar with the

history of the older forms of the language, knows perfectly well that many of the above simplifications actually restore older forms, and are often much to be commended by the etymologist.

At this point I pause awhile, in order to point out two great advantages that would certainly result from the introduction of even such small instalments of spelling reform as those to which I have just drawn attention

The first is that these partial reforms would necessarily involve the disuse of a large number of useless letters. In this way more matter would be got into a page, and some labour in the composition of the type would be saved; and as this would happen in every case, whether the book be small or great, it might very easily save every printer and publisher a considerable sum of money. It would not be surprising if the aggregate saving, in the course of a year, throughout the British Empire, were to amount to some thousands of pounds. Every one would gain by it, the writer would have fewer letters to write, the printer would have fewer to print, and the reader would have fewer to spell and read. Many ambiguities would disappear, and the written record would exhibit a closer approximation to the sound which it professes to represent.

The second is that the task of learning to read would be considerably simplified, and the time taken to achieve that task would be considerably shortened, to the equal delight and profit both of teacher and pupil. In this case there can be no doubt at all that the sums thus saved to the nation would be very considerable.

I now come to the consideration of the present state of the problem. The above-mentioned suggestions for partial reforms in spelling, which were intended merely to remove such uses as are wholly obsolete or unmeaning, were put forward by the Philological Society in 1881, just a quarter of a century ago, at a time when there was a very general desire on the part of intelligent people—particularly with regard to the great drudgery and expense which the modern system of teaching children to read and write involves—to lighten a very great and almost intolerable burden, and to save time for instruction in such elementary subjects as are useful and necessary even in the case of the poorest. Considering the great interest which many take, or profess to take, in the highly important matter of elementary education, it will readily be understood that any proposal to simplify such education, and in particular a proposal such as this—whereby it might very reasonably be expected that the time allotted to learning to read would be reduced by at least one fourth, and probably even by half—would receive encouragement, or at least

a patient hearing, by such as had gone through the drudgery themselves and had a true feeling of compassion for their poorer and more helpless brothers. But the result, I speak it to our utter shame, has been precisely the contrary. There was not a newspaper, journal, or periodical in the whole country (with a few uninfluential exceptions) that was not resolutely determined to crush any such attempt; and the same resolution exists at the present day. Any other proposed reform could have obtained, and could still obtain, some sort of recognition, but not this one. The merest hint that it would be wiser to spell *liv* without a final *e*, in order to distinguish it from the adjective *live*, was enough, and still remains enough, to rouse a storm of indignant denunciation. Of course there is some reason for this, and it is not difficult to discover it.

It simply amounts to this. The indignant writers were discussing a subject which they had never studied, and which they did not understand; and they did so with perfect honesty, because they were not in the least aware of their own ignorance. Such is not the case with such other subjects as are most frequently discussed. The man who does not know botany at least knows that botany is a science that requires to be learnt; and consequently, since he has not learnt it, he must refrain from writing upon it, because some readers will only laugh at him, and the rest will disregard what he says. The same is true, not only of every scientific study, but of most literary subjects as well; the chief exceptions being etymology and phonetics. As for etymology, it was once notoriously the custom to regard as an oracle the wildest guess of the boldest and most ignorant guesser; but most of our respectable journals have exercised such fairness as to permit such ignorance to be exposed; so that the worst offenders have, for the most part, learnt some caution, and have no longer any certain assurance that they will cover themselves with glory by the simple process of guessing at haphazard.

But with phonetics it is far otherwise. They can only be truly taught or explained by the living voice; and they can only be understood, upon paper, by such as have received rather careful instruction. And without some knowledge of phonetics, our spelling cannot be understood or intelligently discussed. And further, this simple fact, though it is obvious to one who knows something of the matter, is wholly unknown to the mass of even the most highly educated of mankind. It may be doubted whether one in ten thousand scholars can answer such a simple question as this:—'How came the symbol *ou* to represent the sound of the diphthong which is now heard in the word *house*, or the symbol *ow* to represent the same sound in the word

cow?' Or again—'How is it that the symbol *oo*, which obviously ought to represent a double or long *o*, is actually employed to represent a double or a long *u*, as e g in the word *cool*, which now rimes with *rule*?' Yet the very men who are wholly unable to answer such questions as these, questions that were once unanswerable but are now familiar to all who know the elements of phonetics, are the very men who presume to sit in judgement on the forms which they do not understand. Still worse, they will not endure to listen to any instruction or to any argument, but dismiss every attempt to represent a spoken word by a more rational symbol with the sole argument which appeals to them, that it 'looks so ugly.'

This is, in fact, what it has come to. The Englishman who has learnt, in the true Chinese fashion, to associate every spoken sound with a fixed and unalterable symbol, however inappropriate or unintelligent it may be, no longer uses his ear, but depends solely upon his eye. For him the sole question is, not how does the word sound, but how does it look. He learns his symbols by heart and by rote, with regard only to their visible appearance. His task is less stupendous than that of the Chinese, because, after all, a large number of our words are phonetically spelt; yet it is remarkable that it never occurs to him that there is no reason whatever why they should not all have the same merit. The more senseless and uncouth the spelling, the greater is the effort to learn it, and it is precisely because it 'looked so ugly' to him when he first mastered it that it looks so beautiful now This very change of ugliness is an unconscious confession that the critic has ended by worshipping what he once abhorred, and, rightly considered, is a severe condemnation of the whole system. If, instead of thus yielding to prejudice, we should dare to use our common sense, it would be obvious that the best spelling of a given word is such a combination of symbols as will at once suggest the sound of it.

It is possible to pursue the consideration of this matter yet a step further. Whence, we may ask, does this general ignorance of phonetic principles, on the part of Englishmen, arise?

I have no doubt that the right answer is one which may not readily suggest itself, and is usually ignored. It arises from the fact that, even in our best schools, boys are never taught the alphabet, and have no knowledge of the true meaning of many of the symbols which it contains. All that they really understand are such consonantal symbols as *b*, *d*, and the like, the values of which hardly ever vary. But of the history of the vowels they usually know nothing For this there is one easy remedy, yet it usually meets with a most

stubborn and unintelligent resistance The remedy is simply this—to teach boys to pronounce Latin properly. As all our symbols are of Latin origin, the first lesson, upon which all other lessons in phonetics are founded, is to learn how Latin was pronounced in classical times. Any one who has once learnt the true sounds of the Latin symbols, a task which may be achieved with sufficient accuracy, not perhaps in a few hours, but at any rate in a few days, by the merest beginner who can read at all, has the true clue to the history of nearly every language in Europe. Yet such is the apathy, such the disregard of this simple yet essential lesson, that, so far from encouraging it, most teachers do their worst in the endeavour to suppress it, and to inculcate the manifest falsehood that the Romans in the time of Augustus employed the pronunciation of the modern Londoner. It has often struck me as a sad satire upon our pretended 'scholarship,' that a student who has acquired such a mastery over the technical structure of Latin verse that he is able to compose lines which he believes to be hardly inferior to those of Virgil or Ovid, is at the same time often so wholly ignorant of the Latin alphabet that he could not possibly read his own lines in a way that a Roman poet would have recognized as being intelligible. It is astonishing that our teachers should recoil from so simple a task as that of teaching the alphabet, as if it were an endeavour wholly beyond their strength and ability! How they can endure to confess such a helpless incompetence is quite unintelligible to me; at any rate at the present date, when the old sounds are so well understood. Surely they will not always desire to be behind the age, to refuse to move with the times, and to let all other nations surpass them.

This is the conclusion of the whole matter. The writings of Dr. Ellis and Dr. Sweet have given the clue to the meanings of our spellings. We may deduce from them the general rule, that a large number of our words are so spelt as to show how they were *formerly* pronounced, which at once explains why they are no longer phonetically exact. Spelling reform is no new thing, but was frequently considered and adopted in past times; yet it has always been somewhat behind the age, and is now no longer a living principle. This is a heavy loss from a practical point of view, and has produced much false etymology. A scientific spelling reform, which would adopt the Italian sounds of the vowels as a chief guide, is a thing much desired by all who have studied the subject, and affords the only adequate solution. Meanwhile, even a partial reform would prove a great benefit; and the nature of such a partial reform can be easily gathered from a perusal of Dr. Sweet's lists, as drawn up in 1881.

There was at that date a slight hope of success, but whatever chance it had was promptly howled down by writers for the daily and weekly press, who did not understand so much as the simple rudiments of the problem, and had neither sympathy with nor mercy upon any one who was capable of instructing them. The same unsuspected ignorance prevails still, and is as noisy and contemptuous as ever. The only hope obviously lies in the possibility that a suspicion of their own ignorance may some day dawn upon writers who, after all, are unaware of their prejudice and are only unintentionally dishonest. They can only see the matter in its true light when the study of phonetics has advanced much further than at present. The reform that would best tend to this desirable result would be the teaching, in our great schools, of a correct Latin pronunciation. This would at once draw attention to the fact that our symbols have a history and a meaning, and the old silly habit of appealing to the *eye* as the best judge of *sounds* would cease to command any serious attention or to be unfairly exalted.

Before we can hope to amend the written forms we must, in fact, learn to understand them; and the beginning of such understanding depends upon the sense of the Latin symbols. It is the reluctance to learn this that really stops the way.

But, at last, there is actually a chance. The University of Cambridge many years ago requested the assistance of Oxford in proposing a scheme for the right pronunciation of Latin, but was unsuccessful. Quite recently, only in the present year, its application was renewed, and this time with success. Our two great universities are now prepared to endorse, and in fact have already endorsed, a simple and intelligible scheme which, even if it be not perfectly accurate in minute points, is perfectly intelligible and sufficiently instructive. If this reform is accepted by the schools, there is indeed great hope. The consequences may easily be far-reaching beyond all that might be expected. For the right pronunciation of Latin throws a full and clear light not only—as even the ignorant admit—upon the sounds and spellings of all the Romance languages, but upon the sounds and spellings of all periods of every language that has adopted the Roman alphabet, including, indeed, nearly all the leading languages in Europe, and especially such as concern us most, viz. Anglo-Saxon, Anglo-French, and the Old Norse. Hitherto, a reformed English spelling has had merely to be hinted at, in order to be at once howled down and scoffed at, but a new race of schoolboys would soon arise who would be ashamed to exhibit such a lamentable mode of argument as that which is solely founded upon prejudice and derision. It seems

to me to be a safe prophecy that, if ever Spelling Reform in England should come to be an accomplished fact, the beginning of the movement will really date from the present year, 1906, when Oxford and Cambridge have agreed, for the first time in recent history, upon a reformed pronunciation of Latin which they are prepared to recommend for the use of every school in the country.

If, however, it should come to pass that a real Spelling Reform should previously be effected in America, it may quite possibly be a gain to us, because the history of the language is there more generally known. I lately met with the President of an American university, who said to me (I have no doubt with perfect truth) — 'In our universities English takes the first place.' This is one of those facts of which the ordinary Englishman is entirely ignorant; indeed, it is almost impossible for him to imagine how such a state of things can be possible. I recommend the contemplation of this astounding fact to your serious consideration.

THE RIGHTS OF NEUTRALS, AS ILLUSTRATED BY RECENT EVENTS

By the Rt. Hon. Sir EDWARD FRY

Fellow of the Academy

Read May 23, 1906

The late war between Russia and Japan has furnished striking evidence of the fact that as science advances it raises new questions in each new war, which require the consideration of diplomats and international lawyers and further, that as the scientific appliances of war are developed the rights of neutrals are more and more imperilled.

There can, I think, be no doubt that the civilized world is increasingly feeling after a system of international law, and is desirous of creating some method for the administration of that law; just as in ages long gone by before any of the great lawgivers arose, men in the state of nature were feeling after and desiring some system of civil law. and what is remarkable is that this feeling flows on side by side with the vast increase of the navies and armies of the world, and of the very striking developments of military and naval science. The two currents of thought flow side by side without merging like the streams of the Rhone and the Arve.

The discussion of the questions which arise from time to time between nations, not in the heated atmosphere of popular assemblies nor as between diplomats engaged on some actual question in controversy, but from a calm and academic point of view, may be useful in strengthening the formation of a body of international law: and for such a labour this Academy seems eminently adapted.

In the final act of the Hague Convention of 1899 the assembled diplomats expressed the wish that the question of the rights and duties of neutrals might be inserted in the programme of a conference to be convened in the near future, and Prof. Holland in his paper on 'Neutral duties in a Maritime War as illustrated by recent events,' read before this Academy April 12, 1905, has very systematically and ably furnished us with a schedule of the

questions relative to the duties of neutrals which require decision. With the rights of neutrals he has not dealt in this paper.

In the *Contemporary Review* for December, 1905, Sir John Macdonnell has argued that the question of the immunity of private property from capture transcends in importance all others, so far at least as England is concerned, and has contended that the question is, and long has been, ripe for decision.

I am desirous in the present paper of presenting to the attention of the Academy some considerations relative to the rights of neutrals, the importance of which has been indicated by occurrences during the late war. and having regard to the magnitude of our mercantile navy, these points seem to affect England more than any other country.

The proceedings before the International Commission of Inquiry into the North Sea incident of October, 1904, appeared at more than one stage likely to raise a question of much importance, namely, whether or no the commander of a ship of war belonging to a belligerent power has, in case of suspicion that he is about to be attacked by any enemy's ship, the right to fire on or otherwise injure the craft which has aroused his suspicions, even though in point of fact the craft in question was perfectly innocent of any hostile act or intention, and belonged to a neutral state. The question is so important that it was perhaps well that the report of the five admirals was so framed as not to involve any expression of opinion upon it, and to leave the matter perfectly open for settlement by international law. This question I will now proceed to consider.

If any affirmative answer were given to this question, it would follow that a commander acting upon this suspicion and doing injury to innocent vessels, however innocent the vessels might be and however disastrous the results, would nevertheless be free from all blame.

Let me in the first place point out that the case which I am considering is that of a neutral vessel on the high seas, on which all mankind have an equal right of passage, and not of a vessel approaching the naval arsenal of a belligerent Power, or going near to the spot where actual warfare is in progress or the neighbourhood of a blockade or other naval operations on the coast, nor is it the case of a neutral ship acting in any way in complicity with a belligerent. Such cases as these would require separate consideration.

So far as I can learn, the affirmative of the question I have stated has never received approval or recognition in any Treaty or other international document, or otherwise been admitted by any civilized nation.

In like manner the writers upon international law are, so far

as I can learn, equally unacquainted with such a proposition. I have searched in vain for any such doctrine in the works of M de Hautefeuille, the great French writer on the rights and duties of neutrals, and of M. de Martens, whose fame as an international lawyer is European

Let me now approach the question on principle

The arguments in favour of the proposition under discussion would, I conceive, be stated somewhat as follows It would be said that the commander of a ship of war is under an absolute obligation to protect his ship from destruction or injury, that the development of the power of attack by means especially of torpedoes has increased the danger of attack, and, as a consequence, has enlarged the right of defence; that this right of defence cannot be effectually acted upon without occasionally causing injury to neutral vessels, and that such injury, when it occurs, must be endured as the result of the exercise of a right of defence.

Now, even assuming the facts involved in such an argument to be correct, the conclusion cannot, I think, be maintained.

The existence of belligerency imposes on neutral nations many obligations, but these obligations, though burthensome, are always obligations which the neutral nations can with care and diligence perform. The doctrine in question, on the other hand, would create a liability to injury which no diligence of the neutral Power or of the craft involved could avoid. Every part of the shipping of the world would be exposed to destruction or injury according to the judgement of the commanders of the belligerent Powers. It seems to follow that if there be circumstances under which the right of defence cannot be exercised without injury to neutrals, it ought not in such a case to be exercised at all.

But the allegations of fact made in support of the argument to which I am replying are not, as I learn, accurate.

It is true that the means of attack have increased, but it is equally true that the means of discovery have increased. I believe that the use of electrical searchlights, the improvement in the construction of telescopes, and now the introduction of wireless telegraphy, have adequately enlarged the powers of discovering the approach of an enemy and of recognizing the innocency of innocent craft, and that if these appliances are efficiently used and accompanied by an intelligent outlook, the protection of the ship does not involve the necessity of ever inflicting injury upon an innocent neutral.

The assurance of the Government of the Czar of Russia given to our Foreign Office that no incident, similar to that on the Dogger

Bank, should occur during the subsequent part of the voyage, may be considered strong evidence that adequate means exist for preventing the destruction of neutral vessels without endangering the safety of ships of war

It may not be quite irrelevant to observe that the rules for preventing collisions at sea, which, by the formally expressed assent of all the Maritime Powers of the world, have become part of the international law of the civilized world, draw no distinction between vessels of war and of commerce, and confer no additional rights on the former class of vessels even in the event of belligerency.

Let me for a moment consider what would be the results of establishing such a doctrine as that which I am dealing with. It would, as I have already suggested, expose the whole shipping of the world to the liability of destruction at the choice of the Commanders of the belligerent navy, and would make the rights of neutrals depend on the existence or non-existence of a psychological fact, namely, suspicion in the mind of the admiral. The burthens of neutrals are already heavy, but if this additional burthen were laid upon them, it would, I submit, be impossible to resist a claim on their part to intervene and terminate a state of affairs intolerable to them without any fault on their part. Each belligerent would, on this doctrine, stand opposed not only to his enemy, but to the whole cycle of neutral Powers · each would become *humani generis hostis*.

Of course, if the international law on the subject were laid down as I submit that it ought to be, breaches of the law might be of very different gravity according to all the circumstances of the case, ranging from cases where the suspicion was so slight that no one could act upon it without gross levity, to cases where the suspicion was so cogent as to make the error all but pardonable. Criminal lawyers will recollect how the crime of manslaughter varies, so that a day's imprisonment may sometimes be a just sentence, sometimes penal servitude for life.

Two events recorded by Reuter's Agency on October 11, 1905, and on January 31 in the present year 1906, may be referred to as raising another question as to the rights of neutrals. According to the earlier account a British steamer on September 30 struck a floating mine ninety miles east of the Shantung lighthouse—with the result that fifteen of the crew were missing (*The Times*, October 12, 1905).

According to the later account the liner *Silvia* which left Vladivostock on the 30th of the month struck a mine, and had to return to port in a sinking condition with the loss of one hand killed, and was

beached to prevent her from becoming a total loss (*Western Daily Press*, February 1, 1906). It is evident that the presence of floating mines carried by the tides and currents of the sea beyond the sphere of military operations, or left in places which have been the scene of naval operations in vigour for months after the conclusion of hostilities, may expose the ships of neutral powers to great damage, and even to total destruction.

If we are to weigh the convenience of belligerents against the convenience of neutrals, it would seem that the interests of the latter ought to prevail. they are more numerous generally if not always than the parties to the war; they are at least innocent parties, and the privileges which they assert are all comprised in the claim to be left alone, in the enjoyment of their ordinary rights. If men are allowed to fight in the street, it will not be unreasonable to demand that they shall interfere as little as possible with the passage of peaceable citizens.

Another incident in the war between Russia and Japan raises a point of international law which is, I believe, novel. *The Times* newspaper sent to the East an English officer authorized to set up a system of telegraphy for the information of their readers: he accordingly established a station for wireless telegraphy on the British possession at Wei-hai-Wei and put it in direct connexion with the land cable service from that place to Europe he then chartered at Hong Kong a steamship the *Haimun*, and had her fitted at Shanghai with supplemental masts for the purposes of wireless telegraphy the vessel then proceeded to the region of the operations in progress between the navies of Russia and Japan; and from March 14 to April 18 a continuous service was maintained between the *Haimun* and the office of *The Times* in London, and information was thus made public as to the operations of the belligerents. Though the establishment of this line of communication was the object aimed at by *The Times*, yet the apparatus when it was working well enabled the operators to make other uses of it. 'We were now able,' wrote the chief operator in charge of the apparatus, 'to receive both Russian and Japanese messages. These messages, of course, came in cypher, and as we possessed no key, it was impossible for us to make any improper use of messages thus received, but we could easily recognize the difference in the systems employed, and by this means—and here another very important thing in favour of our system was proved—we were able approximately to tell the distance we were from the various ships. Moreover our operator, who was extremely expert, began to recognize the notes of the various ships,

that is to say, he could tell if a Russian ship was at sea by listening for the answering communication from the shore. He could also detect whether the Japanese messages were being transmitted by relay to the naval base, or whether the fleet itself was at sea. This was, of course, to us possibly of more value than if we had been able to decipher the actual messages sent, and during the period that the *Haimun* was in operation during April our more successful issues resulted from a careful listening for the wireless telegraphy of the opposing fleets' (*The Times*, August 27, 1904).

I have quoted this passage at length because it shows forcibly the extent to which wireless telegraphy in the hands of a skilful operator may enable the operator to play the part of an eavesdropper to one or both of the belligerent parties: and it is therefore not wonderful to find that the Russians and Japanese alike took steps to get rid of the intrusive ship. About the middle of April the Russian government, by a circular addressed to the Powers, informed them that the Russian viceroy in the East had declared that if neutral steamships were seized off the coast of the Kwantung peninsula, or within the zone of military operations of the Russian naval forces, having on board correspondents who are communicating information to the enemy by means of improved apparatus not contemplated in the conventions dealing with such matters, the cases of such correspondents would be treated as cases of spying, and the vessels fitted with wireless telegraphy would be considered as lawful prize (*The Times*, April 21, 1904).

The course taken by the Japanese government was different. at a date apparently somewhat later than the communication to the Powers of the Russian note, the Japanese authorities communicated with the officers of the *Haimun*, and insisted upon placing limitations on the movements of the vessel which practically rendered her services useless (*The Times*, August 27, 1904).

It is, I think, impossible to maintain the position assumed in the Russian note. If, as there seems no reason to doubt, it was intended to apply to the case of the *Haimun*, it is erroneous in its suggestion as to the facts, for the war correspondent was not communicating information to the enemy directly or otherwise than as he communicated this information to all the world through the columns of *The Times*· but even waiving this point, it seems impossible to hold a correspondent who openly intervenes within the zone of hostilities and openly communicates with one of the belligerents as a spy. Fraud or secrecy is the essential ingredient of spying, and when these are absent it would be a gross violation of

international law to hang the informant as a spy. 'An individual,' says the Hague Convention, 'can only be considered a spy if acting clandestinely, or on false pretences he obtains, or seeks to obtain, information in the zone of operations of a belligerent with the intention of communicating it to the hostile party.'

But if the action of the *Times* correspondent was not the action of a spy, it may well be argued that it was a serious violation of neutrality.

Before we can settle this question it appears to me that we must enlarge the range of our inquiry, and consider what ought to be the rights of persons using wireless telegraphy even in times of peace A concrete case which is affirmed and denied to have recently occurred will help us in this consideration. What is alleged or suggested to have happened is as follows:—A wireless telegraphic station had been installed at Coruña, and had been working there for some ten months. It was ostensibly established on behalf of a Ferrol newspaper, but the whole staff was German, and a large number of telegrams of English origin had been taken up or intercepted and communicated to the German Consul, who immediately transmitted them to his Government (*The Times*, February 6, 1906). The whole story has been denied in a manner which makes it very probable that it is untrue. But as that is immaterial for our purpose, let us assume this account to be correct, and let us ask ourselves first whether the action of the Germans in using the telegraphic station ought to be regarded as a violation of international law. I cannot, for a moment, think that it ought to be. The atmosphere and the ether which surround and permeate the world are not capable of becoming the private property, either of nations or of individuals: and the instruments used to receive wireless telegraphic messages may (subject to any questions of patent right with which we are not concerned) lawfully be used by any person whomsoever

The analogy of sound would support the same conclusion. for I conceive it to be clear that no law would be infringed by a man who on land, where he had a right to be, heard, even by artificial assistance on such land, the sounds uttered by a neighbour and intended for the ears of some third person.

Another consideration which leads in the same direction is the great difficulty, if not impossibility, of enforcing against the transgressor the prohibition of the supposed law.

It would seem to follow that the answer to the question, (whether in civil or international law), should be that the sender of such messages must send them at his risk, and that if the means which he

possesses of securing secrecy are not adequate, he must suffer the evils of that publicity of which he was the first author

If this conclusion be correct, it would further seem to follow that the only right of the Russian authorities in the case of the *Haimun* would have been to exclude her from such proximity to the scene of naval operations as might be held to interfere with such operations but that if the operators of the *Haimun* could pick up the messages of the Russians at any point beyond that range they were at liberty so to do.

I may add that Dr. Marconi has recently communicated to the Royal Society a note on methods whereby the radiation of electric waves may be mainly confined to certain directions (*Proceedings of the Royal Society*, Series A., vol. 77, p. 413). If these methods prove successful, they will obviously diminish the facilities for the interception by outsiders of messages sent by wireless telegraphy.

In conclusion, I venture to submit with great deference to the consideration of the Academy the following propositions as being those which ought to be adopted in reference to incidents which may hereafter arise of the kind above referred to.

1. That the Commander of a ship of war is not justified in injuring a neutral vessel on any ground but the actual misconduct of the neutral, and that he cannot justify such injury on any ground of suspicion.

2. That whilst belligerents are entitled as against neutrals to all the rights hitherto recognized by international law, they cannot enlarge those rights by the introduction of novel instruments or methods of warfare, and that if such cannot be used without the infliction of additional burthens on neutrals, they cannot lawfully be used at all.

3. That the sender of wireless telegraphic messages must send them at his own risk, and that any person may lawfully receive and interpret the same, provided that he does so at a place where he may lawfully be.

THE CELTIC INSCRIPTIONS OF FRANCE AND ITALY

BY JOHN RHYS

FELLOW OF THE ACADEMY

Read May 23, 1906

LAST year I devoted the whole of the month of September and a part of October to the examination of the Celtic inscriptions known to exist in France. Last Easter vacation I took the opportunity of doing the same with the few which Italy supplies; and on both rambles I had the assistance of Mrs. Rhys. A few of the inscriptions which we ought to have seen in France are not to be found, and some there are which we have not yet tried to see. Add to this that when the Berlin *Corpus Inscriptionum Latinarum* has been published for the whole of France, the whereabouts of a few more will probably be made known to the public. I foresee, therefore, that to make the list complete we shall have to repeat the pleasure of visiting France; but in the meantime I venture to offer the list as it stands to the Academy without further delay.

On the other hand, certain inscriptions which have sometimes passed for Celtic are here omitted because I do not think that they are such. Two of them belong to Italy. the first is said by Dr. Stokes to be on a metal plate found near Verona. I refer to his work on *Celtic Declension*, where it forms his No. 4, being read by him as follows: *Qaninio Qikoiemies hisa quasova khik Vepisones*, while Pauli in his *Inschriften nordetruskischen Alphabets*, p. 19, gives it, somewhat differently, as *φaninuφikuremieshuśφasuvakhikvepisines* I have not seen it, and I am not certain where it is; but so far I have had no success in treating it as Celtic. The same may be said of the Este inscription, Dr. Stokes's No. 5, which he reads *Tarknovosseno*, and Pauli, p 22, as *tu · r · knavas · seno*. The piece of pottery bearing this is said to be no longer at Catajo where Mommsen found it, and I have not succeeded in finding what has become of it. Thus the Italian inscriptions which Dr. Stokes made into five are reduced to three, and I am not quite sure as to one of those three. Lastly, to come back to France, I have been obliged to omit the so-called 'Gaulish inscription of Poitiers.' It is on a small plate of silver which is now

at the Château de St-Germain-en-Laye and as the readings given are frequently inaccurate, I submit the following as the best I could make of it, except the division into words which is mechanically my doing rather than the suggestion of the inscriber:—

> bis gontavrion analabis bis gontaurio sv
> ceanalabis bis gontavrios catalages
> uim canima uim spaternam asta
> magi ars sec[? *sct*]uta te iustina quem
> peperit sarra.

I.

i. Evreux. The Museum at Évreux has an inscribed fragment of a table in bronze found in the excavations made at the place known as Vieil Évreux in the neighbourhood: see Stokes's *Celtic Declension*, No 21, and the Berlin *Corpus Inscriptionum Latinarum*, vol. XIII. No. 3204. The inscription now consists of portions of seven lines, all of which are incomplete at the beginning and several also at the end, possibly all. I read the letters remaining, or partially remaining, as follows —

(1) S ʃ CRISPOS BOVI
(2) RAMEDON ⁊
(3) AXTAC BITI EV ʃ
(4) DO CARAÐITONV
(5) N IA SELANI SEBOÐÐV ʃ
(6) REMI FILIA ⁊
(7) DRVTA GISACI CIVIS SVE

The punctuation here seems to be of two kinds, the one stop being like a long ʃ on a small scale and the other, after RAMEDON and FILIA, more like a ⁊ or the abbreviation in Latin MSS. for *et*; for I do not suppose it is to be treated here as *et*, partly because I should not expect it so early and partly because it seems too insignificant in point of size to be a part of the ordinary reading, but instances of this kind of stop will be found elsewhere as, for example, in *C. I. L.*, XII. 2091, 3693. The first line begins with a portion of a letter which looks like the right-hand side of the lower half of an S, but so far as its form goes it might equally well be the corresponding bit of a B: the latter letter is in other respects far less probable than an S as the final of the word to which it belonged. The line ends with what appears to have been an I, but as the fracture occurs along the perpendicular of the letter a D would fit equally, perhaps P, B, R, or E: the appearance of the bronze is not decisive on the point. Similarly the second line begins with an imperfect letter, the bronze

having broken off along the perpendicular of the R, so it is hard to say whether RAMEDON is part of a word or the whole. After it comes a wide space in which there is nothing but a small stop ⁊. Line 3 consists of what appears to be three whole and separate words followed by the stop ʃ. Line 4 begins with an imperfect D followed by O, but there is nothing to suggest that the whole word was DO rather than the end of a longer word. Then comes a space followed by CARAÐITONV, the V of which comes so close to the fracture that one cannot say whether the word as we have it is complete or not. Line 5 begins with a portion of an N which is followed by a space, after which IA come followed by a lesser space. Then we have what I read SELANI followed by SEBOÐÐV with the ʃ stop. From the spaces I should infer that the first word ended with N and that the next may have been IASELANI. Line 6 begins with a wide space followed by REMI FILIA with the ⁊ stop. Line 7 begins with DRVTA GISACI CIVIS SV. There is nothing to show that the entire first name was DRVTA, since a part of the name may have been cut off preceding the D. After SV there remains a little of the left top corner of another letter which may have been E.

The names in this fragment seem to have been Celtic, and CRISPOS and BOVD . . or BOVI . . have been mentioned in my last paper, *Celtae and Galli*, p. 119[1]. The Celtic portion of the inscription would seem to have ended in line 5. the remaining two lines appear to have been in Latin. The form SEBOÐÐV- looks like a lisping of *Sebossu-*, of the same origin as the attested name *Sebosus* and that of the Ala *Sebosiana* or *Sebussiana* as in *Eq(uites) alae Sebussia(nae)* in an inscription found at Lancaster (*C. I. L.*, VII. 287). As we do not know what followed SEBOÐÐV we cannot treat it as a feminine referring to *Remi filia*, so it remains perhaps to regard it as the dative masculine of a name Sebođđos to be identified with Sebosus supposing that to stand for *Sebossos*. REMI would be the genitive singular of the name which was so well known in the plural as that of the Belgic people of the Remi. We have in *C. I. L.*, XIII. 3197 *deo Gisaco* (also found at Vieil Évreux), but the editor thinks that here perhaps *Gisac-i* was the name of a place, and Holder in his *Altceltischer Sprachschatz* treats it in the same way and mentions another *Gisacum*, called in French *Gisay*-la-Coudre in the same department (Eure) But if one is to read . . ḌRVTA GISACI CIVIS SVESSIONIS, as Holder suggests, it seems more natural to treat *Gisac-i* as the genitive here of the name

[1] To the instances of Welsh *sp* = *squ* add that of Welsh *yspyđaden*, 'hawthorn,' Irish *scé*, genitive *sciad*, both of which Dr. Whitley Stokes derives from a stem *skvijdt*.

of a man, the father in fact of the woman whose name immediately precedes his.

On account of the doubly imperfect state of this inscription the syntax completely eludes me, and also the identity of most of the individual words. A search ought to be made for the rest of the bronze, which must have been a document of unusual pretension for a Celtic inscription.

ii ALISE-STE.-REINE. The little town of Alise is some three or four kilometres from the station of Les Laumes, about an hour's rail before you come to Dijon from Paris. It is situated on a slope of the hill called Mont Auxois, on the plateau of which stands the bronze statue erected to the memory of Vercingetorix by Napoleon III. Alise has an interesting museum, among the contents of which is a well-known Gaulish inscription which I wanted to examine. see Stokes's *Celtic Declension*, No. 18, and *C. I. L.*, XIII. 2880; also the *Dictionnaire archéologique de la Gaule*, where (under 'Inscriptions gauloises') in the plates, No. 7, the stone is described as a 'Cartouche avec moulures et queues d'aronde trouvé sur le plateau d'Alise':—

(1) MARTIALIS ▿ DANNΦ A LI
(2) I EVRV ▿ VCVETE ▿ SOSN
(3) CELICNON ❦ ETIC
(4) GOBEDBI ▿ DVGI|ONTI|O
(5) ❦ VCVETIN ▿
(6) IN · · ALISI|A ❦

Some of the words are separated by a little triangular mark, and a leaf has been carved in front of ETIC and VCVETIN and after ALISI|A at the end; but it is right to say that according to the *Corpus* this last belongs to the previous line, and follows the point after VCVETIN. The editor suggests also that there was another leaf in the broken space between IN and ALISI|A, but I cannot accept either suggestion. The lettering is good, and it has one or two points deserving of notice. in DANNOTALI the O is bisected by the perpendicular of the T, and the three letters following are of smaller dimensions and grouped thus, A LI, with the two last letters placed beneath the A. In SOSIN the I consists of a prolongation upwards of the first perpendicular of the N. The I| have usually been transcribed E, but I should rather represent the words in which they occur as *dugii̯ontii̯o* and *Alisii̯a*—that is, with the vowel *i* followed by the cognate semi-vowel or consonant *i̯*. This would, in the case of *Alisii̯a*, for example, represent a stage of pronunciation corresponding to a term *petu̯orii̯a* in the series of modulations from *petu̯oría* to the

Welsh *pedwyred*, *pedwred*, or *pedwared*, 'quarta.' So with the *ịọ* (of *dugiiontiịo*) as compared with the *yd* of Welsh *pedwyryd*, '*quartus* or *quartum*,' and with Welsh *trydyd*, 'third,' feminine *tryded*, which we have possibly in a proper name *Trittia* from Provence (*C. I. L.*, XII 316). The other uncertainty attaching to the reading is as to what has dropped out in the breakage between IN and ALISI|A. The editor of the *Corpus* gives it as his opinion, already mentioned, that it was a leaf, but there is a more natural suggestion to make, namely, that IN was not the whole word, but some such longer form as *indu* or *indo*, 'in, within'. see Stokes's *Urkeltischer Sprachschatz* (p. 31), s.v. *endo*, 'in' As it happens, Holder gives under *In* no instance, except this, which is not such, of a Gaulish preposition *in*. The Welsh preposition is *yn*, 'in,' and there may have been a Gaulish *in*, but the Welsh word when you add to it becomes *ynnof*, 'in me,' *ynnot*, 'in thee,' *ynnom*, 'in us,' &c, where the pronunciation has a double *n* which seems to postulate *nd* as its antecedent. There is another space much smaller than the one last mentioned, but large enough to be noticed · it occurs between the I and the rest of the word IEVRV in the second line. No explanation of this offers itself except carelessness on the part of the inscriber.

A word now as to the names and the interpretation Martialis is evidently the Roman name borrowed, and the father's name *Dannotalos* is well established. It occurs in Etruscan spelling as Tanotalos in an inscription from Briona, near Novara, in North Italy: see No. xxxiv below. Holder gives the corresponding feminine as Danotala Compare also Argiotalus, Κασσιταλος, Dubnotalus, and Vepotalos. The element *talo-s* is supposed to mean the forehead, but there was also an *Evotalis* (Irish *Eothail*), where *tal-* of a different declension may perhaps be a different vocable. In the compound *Dannotalos* the element *danno* is to me obscure as to meaning and origin in spite of such other compounds as *Dannorix* and *Dannomarus*, given by Holder. Before leaving this point it is to be noticed that the genitive *Dannotali* means *Dannotali filius* in Latin. This is one of the regular Gaulish ways of expressing the relationship of father and son another way would have been to have called the son *Martialis Dannotalicnos*, 'M. little Dannotal,' as will be found done in No. xxxiv. Unfortunately in either case we are not given the Gaulish word for son, and there is another formula for Gaulish patronymics, but that also eschews the use of a vocable for 'son' or 'daughter' The next word IEVRV is one of the very few Gaulish verbs which have for certain been identified as such, and it is treated as practically equivalent to the Latin *fecit*, 'made';

but in the *Corpus*, XIII. 1326, the Greek equivalent is given in the imperfect as ЄΠΟЄΙ. Here the Gaulish verb seems to have as its accusative *sosin celicnon* that is, a noun *celicnon* with a demonstrative *sosin*. The former appears to have meant a tower or some such a structure, for the word seems borrowed as *kelikn* into Gothic, where it was used to render the Greek words ἀνώγαιον, πύργος. In Gothic the word was a neuter, and most likely the original in Gaulish was also neuter. The word is probably connected with the Welsh *celaf*, 'I hide or conceal,' and *cel*, 'concealment', in Mod. Irish respectively *ceilim*, 'I conceal,' and *ceal*, which among other things means 'a cover,' and from which a possible diminutive would be *ceilín*, corresponding exactly to our *celicno-n*. So this last might be explained in the widest sense as means of hiding or covering on a relatively small scale, but the Gothic loan-word indicates that it admitted of being narrowed in sense so as to mean a roof or shelter, a tower or turret. Perhaps we may call it a *cell*, at all events the Latin *cella* is usually explained as representing an earlier *cĕlula* or else *cĕla*, from the same root *cel* as Anglo-Saxon *helan*, 'to cover,' German *hehlen*, also Latin *cēlare*, and the Celtic vocables already mentioned.

Of the first clause there remains VCVETE, which according to the run of the sentence should be a dative—in fact a dative feminine like BHΛHCAMI, the dative of Belisama's name in the Vaison inscription, No. vi; and with this declension the accusative *Ucuetin* harmonizes. The analogy of Belesama, dative Belesami, points to the fact that the nominative was *Ucueta*, but another declension seems to be not impossible: *Ucueti-s*, dative *Ucueti*, accusative *Ucueti-n*, either masculine or feminine. On the whole I prefer the other conjecture, that the nominative was *Ucueta*, a feminine corresponding to such masculines as O. Irish *cing*, 'a warrior,' genitive *cinged*, dative *cingid*, belonging to a declension which Dr. Stokes describes as 'weak forms of *nt*-stems'—that is to say, mostly present participles. The stem in the case of *cing*, for early *cinget-s*[1], we have, for instance, in *Cingeto*-rix: compare *Orgeto*-rix, and the like, where the syllable *et* is attached to the verbal stems *cing*, 'to go, march,' and *org*, 'to kill.' Similarly, if we cut off the *et-e* of Ucuete we may expect to have a verbal stem in *ucu*; and assuming such to be the case, there can be little hesitation as to what it must be, namely, *ud-gu*, from which O. Irish had *uccu*, *uca*, 'a choice or act of choosing.' The prefix *ud*, *od* is the equivalent of

[1] Stokes in his *Urkeltischer Sprachschatz* cites *Cinges* from Hefner, 280, genitive *Cingetos*, s. v. *Kenget-*, p. 77

the English *out*, German *aus*. Compare Irish *to-gu*, of much the same meaning as *uccu*; but the stem was in full not *gu* but *gus*, the *s* of which is retained before *t* in Latin *gustus*, 'taste,' a noun of the *u* declension, represented in the *gwst* of the Welsh proper name *Ungwst*, *Unwst* = Irish Oengus, 'Angus,' and Gwrgwst = Irish Fergus, genitive (in Ogam), Vergoso, for an earlier Vergussōs. Accordingly *Ucuet-i* stands for an earlier *Ucuh-et-i*, for *Ucus-et-i*, with the sibilant between vowels changed into an *h*, which eventually ceased to be sounded: compare *siiorebe* in the Gaulish inscription No. xxxi, from Néris-les-Bains. The derivation of our word is phonologically subject to no serious doubt. It is not quite so easy to fix the meaning of it as name or epithet, which may be either 'the choosing one' or 'the chosen one,' 'the loving' or 'the loved one,' *diligens* or *dilecta*. On the whole I should be inclined to treat it as active rather than passive: *compriato*, 'loved or beloved,' in the second Rom inscription is not parallel: see *Celtae and Galli*, pp. 111, 112, 116. This was probably not the name, the *nomen*, of the divinity intended, but an epithet—the loving one—understood by all the worshippers to whom the cult appealed. Here it may be asked, if *s* became *h* and then zero in the body of the name *Ucueta*, why it is we have *Alisiia* with a single *s* flanked by vowels. The answer is that here *s* represents the sharp sibilant *ss*, derived probably from *cs*, for which we have the evidence of inscription xxxii, probably a Celtican one, from the neighbourhood of Bourges. There for 'in du Alisiia' we have 'in Alixie.' After a certain period of indecision as between *s* and *h*, every single *s* found flanked by vowels in written Gaulish should be read as *ss*—that is, provided one could rely on consistency in the spelling. As one cannot often so rely, one has to decide each case according to the etymological evidence: where there is no such evidence, judgement has to be suspended.

Thus far the first part of the inscription has been discussed and inferred to mean—Martial son of Dannotalos made this turret for Ucueta or 'the loving one.' The original covered by this is so exactly one half of the whole as to suggest to me that we have here to do with two verses of text in metre of some kind. Unfortunately the second half consists mostly of words which are obscure. Dr Stokes translates it 'and the work pleased Ucuetis in Alisea,' where *etic* is treated as the conjunction and *gobedbi* as the verb having the next word as its nominative. There is nothing to say against rendering *etic* by 'and,' except that other meanings are possible, but, taking it to have meant 'and,' it would seem to contain *eti-* of the same origin as the *et* of *eto* (earlier *etwa*=*eti-hu-*), 'yet, again' and 'still' as in

gwell eto, 'still better[1].' As to the *c* of *etic* one may perhaps equate it with that of the Latin *hic*, *haec*, *hoc* as part of the particle *ce* in *hicce*, *ecce* which is regarded as of the same origin as Latin *cis*, 'on this side'

GOBEDBI is doubtless the verb of its clause, though it seems highly improbable that it is in the past tense, and instead of saying 'and the work pleased U.' I should rather take the words to mean 'and may the work please U.', that is if *dugiịontiịo* is to be treated as the subject, which is doubtful. GOBEDBI is undoubtedly the reading on the stone, but I cannot make much out of it. We seem, however, to have a choice of easy emendations for DB, such as ÐB, BB and ÐÐ, underlying which should be a lisping of S; for I put in BB on the chance of its being *sb* subjected to a process of assimilation. In that case BB may be dismissed as a form of ÐB then we have left ÐB and ÐÐ, and the first part of the verb detaches itself as *gobes-*, which I should treat as *goves-*=*goụes-* with its semi-vowel written *b* as was usual enough in Late Latin. This points to a word like Latin *gāvīsus*, the past participle of *gaudeo*, 'I rejoice'; but in that case one would perhaps expect a vowel between Ð and B so, rejecting ÐB one falls back on ÐÐ in order to treat the whole verb as *gobeđđi*=*goụessi*. The error might be regarded as due to the inscriber being unused to the letter Ð, which is not always easy to distinguish from a badly formed B. In the copy given to the inscriber the ÐÐ might have had the bisecting line carelessly made so short as not to have caught his eye in the first consonant at all, and in the second only as a part of a somewhat badly formed B.

The conjecture *goụessi* recalls the participial feminine *goụisa*, occurring in the first Rom inscription (*Celtae and Galli*, p 107), where should be compared, in other respects, the verbs *demti*, *demtissie*; also *derti*, *atehotisse*, and *demtisse* in the other Rom inscription (ibid., p. 111, and, corrected, at p. 369 below).

A better conjecture has the advantage of requiring no emendation; for Gaulish had no objection to such combinations as *db* and *dg* witness Αδγεννοριγι and . . ΔΒΟ . ., in Nos. x and xiv see also xxiv[a]. So it would be simpler to treat the *gobed* (=*goụed*) of *gobedbi*, as the equivalent of the *gaud* of Latin *gaudeo* and the γηθ of the Greek γηθέω, 'I rejoice,' compounded with a form of the Gaulish verb 'to be.' The compound might be regarded as somewhat parallel to Latin forms like *ama-bo*, *ama-bam*, *mone-bam*, *rege-bam*, and the like. But the absence of an intervening vowel in *goụed-bi* faces us as before.

[1] See Pott's *Etymologische Forschungen*, i. 251-7, 267, also p. 52.

had such a compound been of old standing, it ought to have become *gouepi* after the analogy of *Ucuete* for *Ud-guhete*. It is probable, however, that the shortening of some such a form as *goyedo-bi* may have taken place relatively late, but early enough to be shared in by Brythonic. Witness forms like Welsh *gwybyd* (= *gwyd-byd*), 'do thou know,' *clybu* (= *clut-bu-*), '*audivit*,' and the older Brythonic *hep amgnaubot*, '*sine mente*, without understanding,' in Mod. Welsh *ymnabod* with *ă* for the *au* of *amgnaubot* (= *ambi-gnāt*[*o*]*-buti-*) because of the stress being at one time probably on the closing element. compare *pedwyryd* from *petyortio-*, 'fourth.'

Next comes DVGIIONTIIO in which I cannot see a nominative feminine, or indeed a nominative at all For had it been neuter, one would expect it to have had a final *n* just as much as the accusatives *sosin celicnon* and *Ucuetin*. Further, this retention of final *n* does not encourage one to assume the discarding of final *s* in the case of DVGIIONTIIO; that is, if one were to treat the latter as representing an earlier nominative *dugiiontiios*. All that remains for us is to regard *dugiiontiio* as a dative or some other oblique case, to be construed in an adverbial sense. What that sense should be is suggested by the congeners of this word, among which Dr. Stokes mentions Greek τεύχω, 'I prepare, I bring about,' A.-Sax. *dugan*, 'to be of value, to be strenuous,' with which go *dohtig*, Mod. English *doughty*, German *taugen* and *tuchtig*, also *tugend*, 'virtue,' to which one may add the Lithuanian *daúg*, 'much, many.' Thus it would seem that we might interpret our word as meaning 'for good' or more exactly 'for our good, and to our joy.' The clause would then run, 'And for our good may it rejoice Ucueta in Alesia.'

It has already been suggested that the whole is in metre, and I scan it roughly, thus —

> Martiális | Dannóta|li iéuru U|cuéti | sósin ce|lícnon,
> Étic go|bedbí du|g'iontíio U|cuétin | índu Ali|siia.
>
> Martial, Dannotal's son, made Ucueta this tower,
> And for good may it please Ucueta at Alesia.

The metre is accentual hexametre, and the characteristic portion of the lines is the last two feet

> sósin ce|lícnon,
> índu Ali|síia.

I need not discuss it here as it has been treated at great length in *The Englyn*, which occupies the 18th volume of the *Cymmrodor*, the magazine of the Hon. Society of Cymmrodorion (London, 1905). It is needless to say that the discovery, if it should prove such, of this

metre on Gaulish ground is of capital importance, as it substantially establishes the fact that in the majority of its words the Gaulish language accented either of the last two syllables as Welsh does to this day. To such a rule, however, there must have been many exceptions, and the first important kind of exception which has attracted my attention is the case of compounds like *Dannótalos*. for more about them see *The Englyn*, pp. 6–10.

iii. DIJON. The Museum at Dijon has a patera in bronze, found in the neighbourhood in 1853, and on the handle is the following inscription with the leaf ornament at the end · see Stokes, No. 17, *Dict. Arch.*, No. 6 and 6 bis; *C. I. L.*, XIII. 5468:—

DOIROS · SEGOMARI
IEVRV · ALISANV ❦

We did not send for permission to take the vessel out of the glass case where it is kept, as we could read it perfectly well where it was, and see that it has been correctly copied. It may be rendered, 'Doiros, son of Segomaros, made it for Alisanos,' though it would be somewhat more exact to put it thus: 'It is Doiros, son of Segomaros, that made it for Alisanos': at all events it would be so in Welsh, 'D. fab S. a'i gwnaeth i A.' The same applies to most of the Gaulish inscriptions, for the fact of the making is assumed to be evident to anybody who sees the vessel it does not require to be told him, and the information given begins with the name of him to whom the making is attributed, so Doiros takes the emphatic position in the sentence. Had the question been for whom the vessel was made, *Alisanu* would have taken the lead: that is, the sentence would have begun with it. At the same time one feels that the English rendering with 'it is' rather exaggerates the emphasis intended on Doiros.

Doiros is a rare name, while that of Segomaros will be found to come before us again: with the former may possibly be equated an Irish personal name *Doir*, *Dair*, *Dáir*, both nominative and genitive, which occur in Irish annals at the beginning of the seventh century. see 'the Four Masters,' A.D. 619, and the *Annals of Ulster*, A.D. 623, compare also O'Grady's *Silva Gadelica*, pp. 56, 57, where we have a place called *Druim Meic Dáir*, 'Mac Dáir's Ridge'; compare also O'Donovan's note on the entry by 'the Four Masters,' where he derives *Gweedore*, a well-known place-name in Donegal, from *Gaeth-Doir*. It is to be noticed that the diphthong appears to have been in Irish *ōi* or *āi*. *Alisanu*, the dative of *Alisanos*, was the name of a god · Holder cites the following Côte-d'Or inscription 'Deo Alisanu Paullinus pro Contedoio fil(io) suo v(otum) s(olvit) l(ibens) m(erito).' Hence it

appears that the vessel belonged to a temple of Alisanos, and the maker seems to have manufactured him a thoroughly good article

iv. Beaune. An inscribed stone found in the eighteenth century near Auxey, in the department of the Côte-d'Or, is now in the Museum at the Mairie of the town of Beaune see Stokes, No. 15, *Dic. Arch.*, No. 4, *C. I. L.*, XIII. 2638. It reads as follows —

ICCAVOS · OP
PIANICNOS . IEV
RV · BRIGINDONI
CANTALON

That is probably—
Iccavos son of Oppianos made Brigindo a hymn.

Here instead of the genitive of the father's name we have a diminutive formed from it, *Oppian-icno-s*, that is 'little Oppianos,' where it is impossible to avoid seeing in *icno-* the termination which we have already had in the neuter in *celicno-n*, p. 276 above: there it was suggested that *icno* is reduced in Modern Irish to *īn*. It is, *par excellence*, the diminutive and endearing termination in that language: we have it for instance in *bóthairín*, 'a lane or narrow way,' from *bóthar*, 'a road,' and in other nouns like *uainín*, 'a lambkin,' and *éinín*, 'a little bird,' from *uan*, 'a lamb,' and *éan*, 'a bird.' In Ogam-written Irish we have it as *-ign-*, for instance in the genitive *Cunign-i*, Welsh *Cynin* in Llan*gynin*, 'Ecclesia Cunigni.' The derivation of *Iccavos* and of *Oppianicnos* is obscure, but they seem to have their congeners in *Iccius*, *Iccio-durus*, *Iccio-magus*, and in *Oppianos*, which occurs as *Oppianus* in *C. I. L.*, XII. 1029, 4679, not to mention such related forms as *Oppius*, *Opia*, *Opiavus*, *Opiava*, as to which see Holder. *Brigindoni* seems to be the dative of *Brigindō*, the name perhaps of a female divinity, to be compared with *Brigantia* and the Irish *Brigit*. *Cantalon* I have supposed to be the Gaulish word, which in Welsh is *cathl*, 'a song': see my *Celtae and Galli*, p. 101. The second *a* in *cantalon* is inorganic, like the corresponding vowel in the Irish equivalents, *cétol*, *cétul*, *cétal*, and in Gaulish it does not appear to have counted as a syllable For the inscription is metrical like that of Alise-Ste.-Reine, and scans as follows.—

Iccávos | Oppia|nícnos i|éuru Bri|gíndoni | cánt'lon.

Here *Brigíndoni* departs from the general rule of accenting the penultimate: it is probably the accent of the nominative fixed, supposing that was *Brigíndō*.

v. Autun. An inscription on a stone found in the last century at Autun is preserved in the Lapidary Museum of that city: see Stokes, No. 16, *Dic. Arch.*, No. 5, *C. I. L.*, XIII. 2733. The stone is slightly

damaged at the top and the right-hand edge, but the reading is certain, and runs as follows.—

LICNOS · CON	
TEXTOS · IEVRV	Licnos Contextos made for
ANVALONNACV·	Anvalonnacos a . . . . seat.
CANECOSEDLON·	

The lettering is said by the editor of the *Corpus* to be of the beginning of the first century: where O follows C or L it is carved small in the bosom of the consonant, the V ending the second line is also made small on account of want of room for a bigger letter. The name *Licnos* is of obscure origin, and is equated by Holder with an Irish *Lén*; however that may be, it occurs in other inscriptions found in the Celtic countries of the Continent, as a glance at Holder's article on it will show In the cognomen *Contextos* the *x* probably means the Greek χ or *ch*, and Stokes refers the second part of the word to the same origin as the Latin words *tego*, *tectum*, and Irish *tech*, 'a house,' with which go the Welsh *ty*, 'a house,' and *to*, in English *thatch*. So he would ascribe to *Contextos* the meaning of protector. *Anualonnacu* seems to be the dative of *Anualonnacos*, the meaning of which is to seek. The compound *canecosedlon* is also obscure, but it has been suggested that it should be rendered 'a golden chair,' that is, with *sedlon* compared with Latin *sella* and English *settle*; but I see no proof that *caneco* meant 'gold or golden,' nor can one be sure of 'chair,' for 'saddle,' in Slavonic *sedlo*, would perhaps be equally admissible, but neither sense seems to derive any corroboration from the vocabulary of the Neoceltic languages. On the other hand, the compound before us appears to supply us with a Gaulish *sēdl-* closely akin with the Welsh feminine *hoedl*, 'lifetime,' whence byr-*hoedled*, 'shortness of life,' which in Med. Irish is expressed in the *Book of the Dun Cow* (fo. 60ª) by gar-*séle*[1]. Analogy would suggest for *séle* and *hoedled* a Gaulish *sēdliịa*; but neither does this help one exactly to see how the *canecosedlon* of the inscription is to be interpreted. Allowing oneself, however, to be more or less guided by the analogy of the transition of meaning from *seat*, for instance, in the sense of stool to a *seat* in the sense of country seat, where a man spends his life, or by the etymologically suggested relation between a *settle* to sit upon, and that of the length of one's stay or sitting in the world as *settled* or fixed by destiny, one might venture

[1] Later MSS. substitute a form *garsecle* or the like, formed with the help of the Latin *saeculum*: I have not succeeded in finding the passage in the readings given in Windisch's *Táin*.

to think it not improbable that the ancient Gauls may have used *sedlon* in both the senses indicated. In that case it might perhaps be suggested that the key to *caneco* is supplied by the Irish word *cáin*, 'law, canon, rule,' for an early Celtic nominative *cāni-s*, whence possibly an adjective *cānico-* or *cāneco-* Thus one would be enabled to interpret the compound word as a 'law chair, a judgement seat or tribunal.' Since writing the foregoing my attention has been called by a passage in M. d'Arbois de Jubainville's book entitled *Les Druides*, p. 5, to two Latin inscriptions at Autun mentioning a Gaulish god *Anu̯alos* or *Anu̯allos* Now our *Anu̯alonnac-u* seems to be directly or indirectly derived from that of the god. This suggests that the Anvalonnacos was in some sense or other in the special service of the god Anvalos, perhaps his *gutuater* or 'flamen,' and that Licnos had made an official seat for him. While giving this conjecture for what it is worth, I may mention that others are possible, though hardly worth mentioning

Like some of the previous inscriptions this also is in metre, in fact the same metre, for it seems to scan as follows —

Lícnos Con|téxtos i|éuru̯ Anu̯a|lonnácu | cáneco|sédlon

It has sometimes been supposed that the legend is incomplete at the top, that is, that Licnos is the latter part of a longer name; but the metre makes this inadmissible, and at the same time it carries the accentual hexameter back to the beginning of the first century.

vi. Avignon (1). The Calvet Museum at Avignon contains among other Gaulish inscriptions one found in 1841 at Vaison in the Department of Vaucluse It is written in cursive Greek letters see Stokes, No 6, *Dict. Arch*, No 2, and *C. I. L.*, XII. p. 162, where the editor describes the writing as *litteris malis et leviter incisis* I can only say that I should have been glad if the rest of the Celtic inscriptions in Greek letters had not often been worse. It will be noticed that the sigma here, as in most of the other Celtic inscriptions in Greek characters, has the form of C, and that the coupling of the Λ consists not of a single straight line but of two, thus ᴧ the reading is the following —

CЄΓΟΜΑΡΟC
ΟΥΙΛΛΟΝЄΟC
ΤΟΟΥΤΙΟΥC
ΝΑΜΑΥCΑΤΙC
ЄΙѠΡΟΥΒΗΛΗ
CΑΜΙCΟCΙΝ
ΝЄΜΗΤΟΝ

Segomaros son of U̯illonos, citizen of Nîmes, made this holy place for Belesama

In this inscription ου stands for u̯ or w as in Ουιλλονεος and for the

vowel *u* as in ειωρου, which has come before us hitherto only in its spelling of IEVRV. When the diphthong *ou* or *ow* has to be expressed we have *oov* as in τοουτιους, but at the same time υ alone, preserving the sound originally intended for it in Greek, is used in the diphthong *au* (pronounced as in German) in Ναμαυσατις. The ει of ειωρου had probably the same sound as that of *i* in the Latin spelling *ieuru* pronounced most likely as a trisyllable *i-eur-u*. Compare Greek ει used even for Latin *i̯* in the name ΕΙΟΥ-ΒΙΑΝΟΣ ΡΕΤΟΣ (*C. I. L.*, V. 5408) which Mommsen regarded as meaning Iovianus Raetus: it comes from the neighbourhood of Como in North Italy. As to the history of Greek ει, see Blass *Ueber die Aussprache des Griechischen* (Berlin, 1888), pp. 31, 34. If any distinction was made between ε and η in Celtic names, it must have been one of quality or breadth as it was in Greek itself (Blass, ibid., pp. 24–7). At all events η does not indicate a long vowel: it is short in the three instances before us, and in two out of the three η seems to have borne the stress accent. Take first Βηλησαμι, which was the dative of Belisama, the name of a goddess identified with Minerva in an inscription found at St.-Lizier in the Department of Ariège and beginning with the words *Minervae Belisamae sacrum* (*C. I. L.*, XIII. 8). Ptolemy in his *Geography*, ii. 3. 2, gives the goddess's name to an estuary in Britain, which is supposed to have been the Mersey, and the MSS. seem to be unanimous in reading Βελίσαμα. From the latter Holder derives *Belismius* (in a Caerleon inscription, *C. I. L.*, VII. 97), and from this in its turn the place-names *Blismus* in the Department of Nièvre, *Blesmes* in that of Marne, and another in that of Aisne. The interest of these forms is that they prove the name of the goddess to have been like such masculines as Cintugnatos, Dannotalos, Segomaros, and similar quadrisyllables accented on the antepenultimate, Belísama: see page 282 above. This is proved by the significant way in which the accented syllable has, in the French place-names, annihilated the two syllables which flanked it in Gaulish. The other word spelt with η, namely, νεμητον, is to be equated with the O. Irish *nemed*, a gloss on *sacellum*: see the *Gram. Celtica*, pp. 10, 801, and compare Strabo's compound Δρυνέμετον or Δρυναίμετον, xii. 5 (C 567), and in Ptolemy's *Geography*, ii. 7. 12, Αὐγουστονέμετον. But this accentuation is doubtless Greek rather than Gaulish, which was probably *neméton*. But our first name was probably *Sĕgómāros* with the stress on the short *o* and not on the long *a*: compare such Greek words as ἄνθρωπος, which is, I understand, become ἄνθροπος in Mod. Greek; but in Gaulish I should rather expect the change, when it took place, to have been towards *Sĕgŏmāros* and even *Sĕgmāros*.

These words may next be reviewed with regard to their etymology and meaning in his *Urkeltischer Sprachschatz*, p 297, Stokes treats *Segomaros* as *Segomāros* with *sego*, meaning 'strength, victory,' of the same origin as German *sieg*, 'triumph'; and *māros* may be taken as the ancient form of Welsh *mawr*, 'great,' O Irish *már*, *mór*. Thus the whole name should mean 'him of great strength or power.' *Uilloneos* is supposed to be an adjectival formation from the father's name, which may accordingly have been *Uillonos* the derivative should mean belonging to or related in some way to Villonos, in this instance related to him as his son. The more usual adjectival ending employed in such cases is that in -*io*- as in *Tarbeisonios* (in No xxvi) and the like, for I do not identify -*eo-s* with the latter, and the question of its origin is a difficult one. But it seems to claim to be equated with the *e* of such Latin formations as *aureus*, 'golden,' from *aurum*, 'gold,' *charteus*, 'of or pertaining to paper,' from *charta*, 'paper,' *terreus*, 'of earth, earthen,' from *terra*, 'earth,' on which see Stolz's *Historische Grammatik der lateinischen Sprache* (Leipsic, 1894, p. 473). Stolz[1], however, is of opinion that Latin -*eo*- represents a prehistoric -*éio*- which lost its *i* 'im Uritalischen', but I should prefer to suppose a still earlier, Italo-Celtic combination -*éo*-, and to regard it as surviving in Latin and Celtic The difference in the application of the termination offers no difficulty. from saying, for instance, that a thing is of earth earthy to the English saying that a man's child is 'a chip of the old block' is but a short step. Another instance to compare with Ουιλλονεος is Λιτουμαρεος, from Litumaros, in No. xvi, and others will be found in Nos. xx and xxxiv.

With τοουτιους Stokes (*Celtic Declension*, p. 54) equates *Toutiu* (better *Toutio*) of the Briona inscription (No. xxxiv below), but the retention here of the final sibilant is rather unexpected, if, as he suggests, τοουτιους is the same vocable whose Latin genitive *Toutio*[*nis*] is restored by Mommsen and Hirschfeld in *C. I L.*, XIII 5278, and whose etymological equivalent is recognized by Dr Stokes in the Gothic *thiudans*, 'king.' With this last, however, the name to be equated is rather *Toutu* or *Touto*, Latin genitive *Toutonis*, which occurs in an inscription found at Arles (*C. I. L.*, XII. 852). These and kindred forms are derived in the last resort from *touta*, 'a people or tribe,' in Irish *tuath*, 'a tribe,' Welsh *tud*, 'a people's country,' Breton *tud*, 'people,' A.-Sax. *theod*, 'the race, the people,' Gothic *thiuda*. If Dr. Stokes's suggestion that TOOYTIOYC represents *toutiuns* of the *n*-declension is to be rejected, one has to regard it as

[1] For calling my attention to Stolz and to Blass I have to thank my friend Professor Joseph Wright.

a nominative of the *u*-declension: in either case it was probably pronounced *toutíus* or *toutíus*, liable to be contracted into *toutíus*. Dr. Stokes renders the word by 'magistrate', but, in the absence of sources of information as to the exact meaning of the word, it seems safer to treat it as meaning no more than a citizen or native of Nîmes.

Namausatis, like *Namausicabo* in No. XVII is derived from *Namausos*, given in Latin more usually the form *Nemausus*, which the French *Nîmes* proves to have been accented *Némausos* or *Némosus*. possibly it reached the Romans through a Celtican channel, while the same vocable in its more Gaulish form has to account for the Νεμωσσός of Strabo, IV. 2. 3 (C 191), which was the city afterwards called Augustonemetum, at the present day Clermont-Ferrand, in the Puy-de-Dôme. The Gaulish form also underlies the actual name of Nemours in Seine-et-Marne[1]. One cannot help also seeing that the *nemetum* of *Augustonemetum* was probably related to Νεμωσσός, perhaps even synonymous with it, and that phonetically the first *a* of *Namausatis* and the *Namausicabo* of No. XVII had taken the place of an earlier *e* under the influence of the *a* of the ensuing syllable this would happen all the readier in a syllable, which in an earlier pronunciation of those words, was unaccented. They are to be traced back probably to the same origin as Greek νέμος, 'a wooded pasture, a glade,' Latin *nemus*, but a more complete parallel—so complete, in fact, as to suggest a case of borrowing—offers itself in the old German *nimid*, 'heiliger Waldplatz' (Stokes's *Urk. Spr.*, p. 192); and Holder, s. v. *nemeton*, cites from the *Indiculus Superstitionum et Paganiarum* the heading 'De Sacris silvarum quae nimidas [=nemeta] vocant' see Pertz, LL. I 19, and LL. Cap. I 223.

As to ειωρου, the ω of the Greek spelling, as contrasted with the *eu* of *ieuru* in Latin letters, seems to prove that there were at least two pronunciations, but we are not helped by the etymology of the word, as its origin is obscure, but it is possibly to be traced to the same source as an Irish verb of which we have the Mediaeval forms *íuras*, 'he or she who does, makes, or causes,' *ní iurfaithe*, 'would not be done or wrought'. see Kuno Meyer's opinion in the *Revue Celtique*, VI. 191, 192, and, as inconsistent with it, Stokes's in his *Celtic Declension*, pp 62, 63, where he is inclined to refer the Irish forms to a compound of the verb *orgim*, of much the same meaning as Latin *caedo*, 'I cut, I kill,' and similar significations Perhaps in Celtic one may compare the personal name *Andiourus*, which Holder would divide into *And-iourus*. As to the termination *u* of the word here

[1] See M. J. Vendryes's 'Mélanges Italo-Celtiques' in the *Mémoires de la Soc. de Linguistique de Paris*, 1905, pp 390, 391, and *The Englyn*, pp 6, 7

in question, it is to be observed that the Irish forms argue a weak verb on a level with the Latin *amo*, 'I love,' or *canto*, 'I sing,' making in the third person singular of the preterite *amavit*, *cantavit*, which are in Italian *amò*, *cantò*. Similarly the *u* of *ieuru* may be all that was left of *-ouit* or *-auit* in Gaulish: compare *logitoe* in No. xxxi, and *carnitu*, *carnitus* in Nos. xiv, xxxiv, xxxvi. That this kind of formation existed in Celtican we know from *voravi* and *pravi* in the Rom inscriptions: see my last paper, pp. 111, 117, 134. *Sosin* probably meant 'this' as in No. ii above, and as it agrees with *celicnon* and *nemeton* it must be regarded as neuter, and contrasted with the Celtican *sosio* used substantivally as a neuter in the Rom inscriptions no less than half a dozen times.

Lastly, the dactylic rhythm of the latter part of the inscription leads me to suppose that the whole was meant to be verse; but I am far from certain that I have hit on the metre intended. On the whole it seems to form a hexametre and a half, somewhat as follows —

Σεγόμα|ρος Ουιλλο|νέος τοου|τίους Ναμαυ|σάτις ει|ώρου
Βη|λήσαμι | σόσιν νε|μήτον.

It is to be noticed that the short line has the stress accent exactly placed as in Horace's *Insígnes aut Théssala Témpe*, or *Iniécto ter púlvere cúrras* in *Odes*, i. 7 and 28, that is, when read as prose. I should not venture, however, to suggest that the author of the inscription knew anything about the Alcmanian couplet, but only that he imitated the (prose) accentuation of the hexameter, and took also the liberty of appending a part hexameter. But as we are now getting southwards, with Massilia not so very far off, a question which I cannot answer presents itself—Was the hexameter, which the Gauls set themselves to imitate and to modify in their own way, taken from Roman poetry or directly from the Greeks?

vii. AVIGNON (2). On the hill overlooking the town of Orgon, in the Bouches-du-Rhône, was discovered in 1866 an inscribed stone, which is now in the Calvet Museum at Avignon: see the *Revue Celtique*, vii. p. 450, viii. p. 397—both inaccurate, and *C. I. L.*, XII. p. 820. It reads as follows —

OYHBPOYMAPOC ΔЄΔЄ TAPANOOY BPATOYΔЄ KANTЄM	Vebrumaros gave firstfruits to Taranus by decree

The lettering, which is not good, has the following points deserving of notice. The Y consists of a perpendicular stroke prolonged below the line, and of a short straight line branching from the upper part

of that perpendicular towards the left. The B has its lower part larger than the upper, and the arcs are seldom brought together to touch the perpendicular. The P is long, with its semicircle small and tending to become a triangle. The second O is smaller than the other letters. The sigma (imperfect at the top) and the alpha have the same forms as in the Vaison inscription, No. vi, also ου and οου are here used as in that one. No intentional ligature occurs, but other inscriptions go to prove that what is here clearly an M should have been a ligature for NA. that is, it lacks the joining line. Most likely the workman who carved the letters misread the copy given him, with the last word correctly spelt KANTENA, but with the two last letters ligatured; unless M be simply a slip, for N.

The name Vebrumaros is remarkable in having the vowel *u*, not *o*, at the end of its first element whether this means anything more than an obscure sounding of the vowel, it is difficult to say; but compare such datives as *Alisanu* in iii and Ανευνο in xxxi^a. The meaning of the name is not certain; but the second element is probably to be treated as *māros* and identified with that of *Segomāros* in Nos. iii and vi, and *uebru* is perhaps to be explained by reference to the Welsh word *gwefr*, 'amber.' In that case the compound would seem to have meant one who was great or distinguished for his amber, one who made a display of amber in the adornment of his person. *Taranou* is the dative case of *Taranu-s*, 'a divinity identified with thunder' the Welsh word is still *taran*, 'a thunder.' The declension was probably nominative *Taranu-s*, genitive *Taranous* or *Taranoṷos*, and dative *Taranoṷi*, retaining possibly an old Aryan accentuation *Taranóṷos, Taranóṷi*. It is a shortening of this latter that we probably have in *Taranou*, written here TAPANOOY. Compare the doubtful case of Γρασελου in No. xiii, and contrast Μαρεοουι in x and Ειυουι in xviii: see also xxii.

To come to the other words, *dede* is probably more or less analogous in formation to the Latin reduplicate verb *dedit*, 'gave.' As to *cantena*, this has been touched upon in my previous paper, p. 104, where the meaning of *primitiae*, or firstfruits, has been suggested in connexion with the entry (on the 13th of August) concerned with the offering of the harvest to the god Rivos To the remarks[1] made thereon I would add that while Irish *cét-* corresponds to a Welsh *cant-*, the common Celtic combination was probably cn̥to-, whence a strong form *canto-* and a weak one *cinto-* (as in Gaulish names like *Cintúgnatos*), in Irish *cetu-*, *ceta-*, *cita-* (Stokes, *Urk. Spr.*,

[1] So far as they postulate C. RIV they are to be cancelled, for the right reading is G. RIV: see pp. 358, 363 below.

p. 77), represented in Welsh by *cynt*, 'previously, before.' As a related word may perhaps be mentioned Latin *re-cens*, *re-centis*, English *recent*; and the phonetic sequence in Goidelic is illustrated by the *Cantlo-s* of the Calendar being represented in O. Irish by *cétol*, *cétal*, while the Welsh equivalent *cathl* (for **cantlo-n*) 'song' retains the older vowel throughout.

The word *bratude* offers some difficulty, for it is not quite clear whether it is made up of *brātu-*, 'a judgement, doom' (Welsh *brawd*, as in *Dyđ Brawd*, 'the Day of Judgement,' Irish *Lá Brátha*), with *de*, 'from,' as a postposition, O. Welsh *di*, pronounced (as a preposition) probably *đi*, Med. Welsh *y*, Irish *de*, or else that βρατουδε is a derivative from *brátu*, not involving any postposition, but carrying with it the sense of 'through or because of a decree,' by virtue of its being in an oblique case, say the ablative or instrumental, βρατουδ-ε. Compare *in Alixie* in xxxii, also the forms Acmodae, Bagaudae, bascauda, Cassauda, Sapaudus, collected by Holder under *-dos*, *-da*, *-don*, and also such Irish words as *crabud*, Welsh *crefyđ*, 'religion,' which Stokes derives (p. 97) from **crab*, 'piety or religion.' In his *Celtic Declension*, pp. 62-4, he interprets *brātu-de* as 'by decree,' 'by order,' and cites as its Latin equivalent *ex imperio*, from an inscription reading 'Matronis Afliabus M. Marius Marcellus pro se et suis ex imperio ipsarum,' from J. De Wal's *De Moedergodinnen* (Leyden, 1846), No. cxx (p. 88). There it is to be noticed that the originating of the decree is ascribed to the Mother-goddesses themselves. That is probably the way to interpret βρατουδε, but the instance does not settle the question as to the composition of the word.

viii. AVIGNON (3). Among other inscriptions in the Calvet Museum is one from Apt, or more precisely from St.-Saturnin-d'Apt. It is an imperfect one on a small altar reading as follows. see Stokes, p. 64; *C. I. L.*, XII. p. 137:—

ΟΥΑΛΙΚΙΟ ΟΝΕΡΕϹΤ/// ΑΙΟΥΝΙΑΙ	'Valicio son of Onerestos to (the goddess) Aiunia.'

The letter here given as the last of the first line may have been either C, that is *s*, completing a name Valicis, or else O with its right side broken off—the right edge of the stone is all very rough and imperfect. *Valicio* would probably be a noun of the *n*-declension there is nothing to suggest *ualicios*. The next line may have had an I after the T, hardly any broader letter. An Arles inscription gives a potter's mark (*C. I. L.*, XII. 5686. 747) as RESTI O—that is 'Resti

O(fficina),' and according to that one might treat *Ualicio Oneresti* as meaning Valicio son of Onerestos. *Aiouniai* is more difficult to interpret, except that it is probably a dative of the name of a goddess. Her name in the form we have it admits of being explained in the following ways: (1) The termination *ai* is a way of representing the *e* which Stokes sets down as the ending to be expected—his declension, p. 102, gives 'nom. *rēda*, gen. *rēdēs*, dative *rēde* (*rēdī*?), accusative *rēdim*,' 'a chariot'; and the name as a whole may be of the same origin, presumably Celtic, as the man's name *Aio* or *Aiio* of the *n*-declension, as to which see the inscriptions cited by Holder. *Aiunia* would be a derivative from *Aiuno-s* (*Aiuna*, *Aiuno-n*) and the termination *-uno-s* may be a variant of *-ono-s* (*-ona*, *-ono-n*) which Holder illustrates by means of a long list of names ending with it. (2) Treat the terminal *ai* in the same way as before, but suppose the name of the goddess to be the Greek word *αἰωνία* borrowed and modified in Gaulish into *Aiunia*. This would require one to suppose that some of the Greeks with whom the Gauls had come in contact had a goddess called the Eternal or the Everlasting One. (3) Treat the whole word ΑΙΟΥΝΙΑΙ as intended, in spite of the spelling with *ου*, for the Greek dative *αἰωνίᾳ*, and it would naturally follow that we should regard the inscription as a whole as Greek, and not as any kind of Celtic. Now on comparing other inscriptions, such as the next one here, I am inclined to favour the first of these three interpretations, but I feel by no means certain on the point.

IX. AVIGNON (4). In the court of the Calvet Museum is an inscribed block of considerable weight brought there from Gargas in the Department of Vaucluse. In the *Corpus*, XII. p. 137, it is treated as being still at Gargas, and I failed to learn when its removal took place. Stokes's reading, p. 64, is inaccurate, which is owing probably to a misprint, as the lettering is good and perfectly plain. It consists of one line close to the top edge of the block, and runs thus —

ЄϹΚЄΓΓΑΙΒΛΑΝΔΟΟΥΙΚΟΥΝΙΑΙ

It probably means 'For Escenga daughter of Blandouicunos' Here we seem to have the same dative ending ΑΙ for *e*, for I see no reason to suppose this inscription to be Greek. Both names seem at any rate to be Celtic: the stem *esceng* stands probably for what might otherwise be expected as *excing*. Compare ЄϹΚΙΓΓΟΡЄΙΞ in inscription xx, and names like *Excingomarus*, *Excingillus*, *-a*. But very possibly *x* is here nothing more than another way of writing *s* or *ss*, that is to say, the prefix *ec-s* had in pronunciation been reduced to *ess*, at least when it came immediately before another consonant. The

adjective agreeing with *Escenga* probably involves the father's name, which would be *Blandouicunos*, and this in its turn looks like a derivative from *Blando-uix*, genitive *Blando-uicos*, to be compared with such forms as *Ordo-uices*, 'hammer-fighters,' *Brannouices*, *Lemouices*, and others: the ending *-uni-ai* reminds one of the *Auuniai* of the last inscription What the *blando* portion of the compound meant is not evident. if it be of the same origin as Latin *blandus*, one might perhaps explain the name as meaning a bland fighter, a courteous warrior.

Lastly, I wish to mention that the stone bearing the above writing was dressed for another purpose it seems to have come out of a great building, and it bears on the face of it, what seems to have escaped the editor of the *Corpus*, traces of a long and elaborate inscription which a stonecutter has purposely effaced, but here and there one can identify a letter or two. Thus towards the left edge, not far below the Greek lettering, I thought I detected CII or CV, a little lower I ORDO, but the two last letters were doubtful; also a good deal lower down, and of a larger size, I detected VG or AVG (with AV ligatured) or perhaps NC. I mention these merely in order to call further attention to the stone, as somebody with better eyes than I have may be able to make out enough of the writing to obtain an idea to what it related. The placing of the Gaulish inscription so close to the upper edge of the block is probably to be explained as due to a wish to avoid as much as possible the earlier writing, and even the area where it was known to have been.

x AVIGNON (5). In the same Museum there is an inscribed column from L'Isle-sur-Sorgue in the Department of Vaucluse. The lettering is bad, and the surface of the stone is so irregular, owing to holes and scratches, that I have not succeeded in reading it so as to make sense of it. In the *Corpus*, XII. p. 822, it is given as ΑΔΓΕΝΝΟΡΙΓ ! ΟΥΕΡΕΤΕ//ΜΑΡΕ/ΥΙ; but I was inclined to think that I detected traces of an I after the second Γ of the first line, also that the letter following the tall T may be an O. Then comes a gap where there should be perhaps two letters. Then I jotted down some strokes in which I fancied I found a Λ and an A, but I concluded that Hirschfeld's MA cover the space and the traces of writing more satisfactorily. After the second ΡΕ I seemed to see a C or the beginning of OO, which would fill the gap before ΥΙ. The guesses may accordingly be read thus —

ΑΔΓΕΝΝΟΡΙΓΙ
ΟΥΕΡΕΤΟ///ΜΑΡΕΟΟΥΙ

The whole looks as if intended to be in the dative case, and if one take Hirschfeld's ΟΥЄΡЄΤЄ to be the better reading, which it may well be, the readiest way to complete the name would be to suppose it to have been Ουερετεου (= *Verete-u*) dative of Ουερετε-ος, 'son of Ουερετος': compare Ουιλλουεος in No. vi. Lastly, Μαρεοουι could only be the dative of a word of the *u*-declension making in the nominative case Μαρεους, which could hardly be anything else than the Latin cognomen *Marius*, borrowed and adapted as a noun of the Gaulish *u*-declension; but why Μαρεους rather than Μαριους is not clear. Instances, however, of Greek ε for Latin ĭ are by no means wanting: witness such ones as Καπετώλιον, λεγεών, and others cited by Blass, loc. cit., p. 34, and in Latin inscriptions there is no lack of ĕ for ĭ, such as *fecet* for *fecit*, *uteles* for *utilis*, *Veatori* for *Viatori*, and many more brought together in the *Corpus*, vol. XII. pp. 953, 954. The Gauls could doubtless readily pronounce *Márius* or *Maríus*, but they may have had a difficulty in hitting off *Máriŭs* as a trisyllable, and got used to say *Márĕŭs*. Be that as it may, the whole, according to the view here advanced, might be translated:—'To Adgennorix Marius, son of Veretos.' The Gaulish, it is seen, comes as near as it was possible without using a word for son, to the ordinary Latin formula in such cases as the following: *Aemili Calvini f. Sabiniani*, 'Of Aemilius Sabinianus, son of Calvinus' (*C. I. L.*, V. 6527) and *Devilliae Catulini fil. Titiolae*, 'Of Devillia Titiola, daughter of Catulinus' (ib., XII. 2271). If these conjectures should prove well-founded, one might regard this inscription as pointing to the second or first century B.C., when the conqueror of the Cimbri, Teutones, and their allies was the greatest name in the Roman world, and especially in the Rhone valley in Southern Gaul.

XI. AVIGNON (6) A piece of a column from the neighbourhood of Apt bears an inscription in mixed Greek and Latin letters, which are now hopelessly illegible in part. Hirschfeld has tried them in the *Corpus*, XII. p. 822, and I agree with him as to the latter part of lines 1 and 2; but he is wrong as to the word forming line 3, which he gives as ΑΔΕ with a suggestion of something to precede the Α. The word is no other than the Latin VALE, with V and A ligatured, and the L a little damaged. This, together with the portions of the other lines fairly legible, will stand thus —

The sigma at the end of the first line is imperfect it tends to be

square, and is decidedly so at the end of the second line It is the form used throughout the Cassitalos inscription (No. xviii) at Nîmes, and it was probably not arrived at by angulating the rounded sigma C, but by giving Σ a straight back it is here transcribed ⊏. The NO consists of a badly formed N with a little O in the top angle, which is made wide like some instances of the Etruscan N in Nos. xxxiv, xxxvi below; but the N in the first line is different· one might perhaps read IOV rather than NO. The R is very degenerate, consisting of a badly made P with the stem crossed by a straight line near the bottom of the bulge at the top a somewhat better instance occurs in the earlier portion of the first line, where I guess NITOVC, to be preceded by NERAIP. The NE would be a ligature, but the N portion is very doubtful the ER are fairly certain and probably end a word. As to ΛI, this is also Hirschfeld's reading, but it is just possible one should read N. He represents the next letter as a ♀, but I do not think it anything but a badly shaped Latin P, and instances of it will be found beginning a potter's name, *Perimos*, in the *Corpus*, XIII. 10010. 1525. Before ARNOS Hirschfeld has an N, but I see there a ligature which might be read either AV or AN, and preceding it I thought I detected an M; but needless to say it is very doubtful. I ought to have said that to the right of the fracture in the first line Hirschfeld has an italic F, which I suppose should be the beginning of the line, but I gave it up. My conjectures, brought together with the utmost diffidence, stand as follows:—

. . . . NER AIPNITOYC
MAVARNOC
VALE

In the *Corpus* this has been classed as a Celtic inscription, but one cannot be certain to what language it belongs, with the exception of the word VALE, with which I leave it.

Before quitting the Calvet Museum I may mention that a cast was shown me of an inscription supposed by some to be Celtic: I first heard of it from M. Maruéjol, Conseiller Général at Nîmes, whose letter describes it as an 'inscription rupestre, gravée sur un rocher qui borde la Durance à Cavaillon (Vaucluse),' and he gave the reading

ΟΥΕΛΡΟΥ
ΦΗΚΙΚΟϹ

On looking at the cast I felt inclined to read Δ instead of Λ in the first word; but I missed visiting the original, which, though only about twenty minutes' walk from the railway station at Cavaillon, is

very difficult to find. This I learnt from a letter from another Nîmes archaeologist, Dr Michel Jouve, Conseiller at the Cour d'Appel, who was spending his vacation at Cavaillon, and would have kindly guided me to where the inscription is covered by the mud of the Durance. Since he rediscovered it some years ago he has acted as guide thither, among others, to M. Labaude, head of the Musée Calvet at Avignon, who has, I am told, contributed a note on it to the *Mémoires de l'Académie de Vaucluse*, 1903, p. 164. Dr. Jouve's letter reached me too late for me to avail myself of his kind offer. In any case, I do not suppose the inscription to be Celtic.

xii. MALAUCENE. An inscribed stone found at Beaumont, near Vaison, was taken to his house by an antiquary named M de St-Bonnet, and finally removed to his home at Malaucène, where it and other antiquities collected by M. de St.-Bonnet are preserved by his courteous and hospitable heir, M Chastel. This inscription is all in Roman letters, and as a whole it is in the Latin language see Stokes's No. 24, where the initial letter has been read I instead of S, and *C. I. L*, XII. 1351, where the reading is more correctly given, as follows —

SVBRON//
SVMELI
VORETO
VIRIVS · F

The right-hand top corner is broken, but after N there is still to be seen the foot of some such a letter as I, possibly E. The whole of the right-hand edge of the stone is rough and broken, but I fancied I detected a stop at the end of the second and third lines in any case, I do not suppose much is gone. As to the lettering there is nothing much to be said, except that the S is long and sprawling the tail of the last one passes below the line almost beneath the V preceding. The F has its horizontal lines very near one another, and of about equal length. This is one of the inscriptions which have been painted in red, and as usual incorrectly painted, whence it is perhaps that the long initials was misread I.

The interpretation offers considerable difficulties as it admits of being construed in several ways (1) F probably stands for the Latin word *fecit*, and the Latin proper name *Uirius* may be taken as the nominative. (2) *Uoreto-uirius* would make a Gaulish patronymic, meaning, according to the analogy of other instances, 'son of Voreto-viros': the latter seems to be exactly represented in Welsh by *gwared-wr*, 'rescuer or deliverer,' from *uoreto-*, Welsh *gwared*, 'deliver-

ance,' and *ųiros*, Welsh *(g)wr*, '*vir*' That being the meaning of *ųoreto*, it does not appear how to construe it except as part of a compound *Ųoreto-ųirius* rather than attach it to *Sumeli*. (3) This latter word may be taken to stand for a nominative *Sumelis*, and one would then construe *Sumelis Ųoretoųirius* as 'Sumelis, son of Voretoviros' and treat it as the subject of the verb *fecit*. But (4) it seems improbable that Subroni and Sumeli are to be severed, and if they are construed together we have the following three possibilities to take into account (*a*) We construe Subroni(s) Sumeli(s) Voretovirius as the designation of a single man that would give the inscription only a minimum of sense. (*b*) Say Subroni and Sumeli go together as the names of two members of the family of Voretoviros, and you may construe thus· 'Sumeli(s) son of Voretoviros made this for Subro,' but that sounds forced as you ought to have a word for brother, sister, mother, or the like. (*c*) Take the alliterating names Subroni and Sumeli to have belonged to a single person, and the whole may be rendered thus Voretovirius made (this) for Subro Sumelis.

Of the possible interpretations—I am not sure that I have exhausted them—I give the preference decidedly to the last mentioned. It is doubtful, however, what it was that Voretovirius made, but it was probably some kind of a building in the wall of which the inscribed stone had been duly placed. So the building may have been either a temple or a tomb at any rate Hirschfeld thinks the inscription admits of being regarded as a sepulchral one. Unfortunately the names do not help one to decide whether the bearer of the two first was divine or human. *Sumelis*, however, seems to point to a female rather than a male. The prefix *su* or *so*, Irish *so*, Welsh *hy*, is largely used in the Celtic languages to make adjectives implying the qualities or characteristics of what is suggested in the ensuing portion of the *su*-word. Take such examples as the following —Gaulish *su-carus* (*C. I. L.*, XIII. 10010. 2408), O. Breton *hocar* (in *Eu-hocar*), Welsh *hy-gar*, 'amiable, apt to be loving or friendly,' from *car*-, 'to love', Irish *so-chruth*, 'good as to shape, fair of form'; Welsh *hy-bryd* (unattested), the contrary of Irish *do-chruth*, Welsh *dy-bryd*, 'deformed, hideous, ugly,' from *cruth* and *pryd*, 'form, shape'; Welsh *Hy-wel*, *Howel*, 'conspicuous, easy to see,' from *gwel-ed*, 'to see'; Welsh *hy-law*, 'distinguished for his hand and its cunning, dexterous, handy, εὔχειρ,' from *llaw*, 'hand', *hy-barch*, 'venerable,' from *parch*, 'respect', and *hyffordd*, 'having knowledge of the way,' whence *hyffordi*, 'to put one on the way, to direct and instruct.' Having regard to the majority of this category of words one might reduce them into two groups (*a*) those in which the prefix has the force of 'good or desirable,' and

(*b*) those in which the idea of 'good or desirable' does not appear, but only the neutral one of 'capable of being, doing, or suffering in a certain way.' Some, however, of the instances are hard to classify: take for example *hydraul*, which Davies renders 'tritu facilis, consumptu facilis, εὔτριπτος' that fits well enough into the second group until you come to the passage he had in view when he added the Greek word. It occurs in the *Mabinogion* (Oxford edition, p. 55) and reads 'a hen dillat *hydreul* tla6t ymdana6,' meaning 'clad in old clothes, threadbare and poor.' This signification of *hy-draul* from *traul*, 'wear, waste,' will not fit the first group though it may be Englished as 'well worn,' and not into the second except by force of throwing back the capacity for being worn into the past. Now as *su-* is supposed to have originally meant 'good or well,' an inference drawn from the fact that *su-* and *hu-* occur in the same sense in Sanskrit and Zend, we have to refer Sumeli(s) probably to the first group of words with *su* and guess its meaning as well as we can. What words there were in the Celtic languages with the combination *mel* one cannot tell, but one such for certain was the word for honey, which in Welsh is still *mel*. If one fix on that I should gather that Sumelis meant one who had the leading attribute of honey, namely, sweetness, let us say in his or her speech and disposition; that is, Sumelis would have meant honey-like or sweet-spoken. the derivative *somilse* meant in O. Irish 'sweetness, *dulcedo*.'

So much as to the meaning of the name, the examination of the inflection places one on a surer footing. In early Brythonic and Gaulish the declension was probably not very different from what it was in early Goidelic, and the latter can be constructed as far as one wants from Mediaeval Irish which was nominative *mil*, genitive *mela*, dative *mil*. The Latin was *mel*, genitive *mellis*, and the Greek μέλι, genitive μέλιτος, both neuter, while Welsh *mel* is masculine and the Mod. Irish feminine; but supposing the Irish and Welsh were also originally neuter, the Irish forms were, for early Goidelic, nom. *meli*, gen. *melў-as*, dat. *meli*. If the word was not neuter then the nominative would be *meli-s*, and whether *mel* was neuter or not the personal name would be *Sumelis* with a dative *Sumeli*, the form which we have here standing in the Latin inscription as the epithet or surname, as I take it, of Subroni.

Analysing this latter name into *Su-broni* in the dative case, the question is what we are to make of *bron-i*. One mechanically thinks of the Greek σώφρων, neuter σῶφρον, genitive σώφρονος, dative σώφρονι, 'of sound mind, discreet, prudent.' However, I am not rashly going to identify the Greek σω- in this word with our Celtic *su-*, as I am

aware that there are difficulties in the way, but the second element remains attested by such words also as εὔφρων, εὖφρον, 'cheerful, making glad, well-minded, kindly,' πρόφρων, -ον, gen. πρόφρονος, 'well-wishing, gracious, zealous,' ἄφρων, -ον, genitive ἄφρονος, 'senseless, frantic,' φρόνησις, 'purpose, high character, good sense, practical wisdom,' all connected with φρήν, gen. φρενός, 'the midriff, the heart, *praecordia*, the breast, the seat, as it was supposed, of the mental faculties.' So one may regard *Subroni* as of the consonantal declension—nom *Subrō* for an earlier *Subron-s*, and dative *Subron-i* which appears to be the reading in this inscription. But the cognates are not confined to Greek we have them also in the Celtic languages, and among them may be mentioned the Welsh *bryd*, 'mind, thought, purpose,' Irish *breath*, 'judgement, verdict'; and Stokes (s.v. *bera*, *brā*) interprets the Gaulish *vergo-bretos* as '*iudicium exsequens*'; from Welsh *bryd* is derived *ded-fryd*, 'a verdict,' and *hy-fryd*, 'to one's mind or liking, pleasant, agreeable,' but explained by Davies as 'hilaris, amoenus, εὔφρων.' Another derivative from the same root is to be found in the βρατουδε already noticed in connexion with No. vii, p. 289 above, where the βρατου portion of the word has been referred to the same origin as Welsh *brawd*, 'judgement or doom,' Irish *bráth*, the equivalent of which Stokes finds in such Gaulish names as Bratuspantium, Mandubratius, and Cassibratius. In connexion with this suggestion his editor Bezzenberger suggests the possibility of referring to the same origin the Greek word φρήν and O. Norse *grunr*, 'ahnung,' and *gruna*, 'beargwohnen'—this, should it prove sound, would go to show that our Celtic words could not have anything to do with the root from which Latin *fero*, Greek φέρω, 'I bear,' and their congeners come, inasmuch as it suggests as stems rather *ghr̥ron*, *ghr̥ren* However that may be, the Neoceltic languages have also cognates in which the nasal appears, namely Welsh *barn* (fem.), 'judgement,' and Irish *barn* (masc.), 'a judge.' But we have no stem exactly to match the *bron* of *Subroni* as the Greek forms do. The meaning of the name would be 'good at thinking, possessed of sound judgement, prudent and wise.'

xiii. NOTRE-DAME DU GROSEL, formerly *Grasellus* in Latin, near Malaucène. A little beyond M. Chastel's house one comes to the church of Notre-Dame du Grosel or Groseau, situated in one of the most picturesque nooks I have ever seen; and there in front of the entrance is a mutilated inscription on a stone which forms part of a structure to hold a cross. According to one of the authorities quoted in the *Corpus*, XII. p. 824, the stone served some time previously as the support of the Roman altar (*l'autel romain*) in the little chapel

of St. John the Baptist, said to be the oldest chapel of the Groseau. Further, a document quoted by Holder, under *Grasellus*, appears to carry that form of the name back to the beginning of the seventh century, and speaks of a 'monasterium in loco nuncupato Grasello'. It seems to be the same place, though Holder does not refer to the inscription there. The spring of the Groseau is a little further than Notre-Dame, and for lack of time I had regretfully to leave it unvisited. The reading given in the *Corpus* is as follows:—

////ΛΟΥC
///ΛΛΙΑΚΟC
/PACEΛΟΥ
/PATOYΔE
KANTENA

I ought, however, to say that for typographical reasons this ascribes a little too much to the *Corpus*, which gives only the first limb of the final A of KANTENA, and only the second limb of the first Λ in the second line; but even that was rather more than I can be quite sure of. With regard to the original, I found the bottom of the Y in the fourth line damaged so that the letter now looks more like a V. I could not be sure of the B of βρατουδε, though it must have been there formerly, and the same remark applies to the Γ at the beginning of the third line, but I thought I could trace the P following it, also the inner outline of an I at the edge where the reading quoted by Stokes, No. 12, gives a B, and makes the whole line into MACEΛΟΥB. The reason for that reading is not evident, and Hirschfeld is probably right in making it into Γρασελου, which one may possibly complete into Γρασελουι.

The C given in the *Corpus* at the end of the second line is scarcely to be traced now, and the letter preceding it is given as O. At first I took it to be E, but on examination it appeared to be an O, the circle of which has been squared: in fact most of this inscription has been tampered with and scratched in order, I suppose, to renovate it. I jotted down the whole of the line as yielding traces making IΛΛΙΑΚΟC, but that can hardly be the correct reading: it has too many lambdas. Possibly the ΛΛ should be regarded as representing a M: we should then have -ιμιλκος, but I cannot guess what the whole word would be. The same difficulty would meet us if we treated IΛ as traces of ΓΑ and the third Λ as A, for that would yield -γαλιακος: what might be the whole word? A simpler conjecture would be to read -IΛΛΙΑΚΟC, which might be completed perhaps as Βριλλιακος: Holder gives *Brilliacus* as the name of more

than one place in Gaul, but none near Malaucène. Better than all these guessings perhaps would it be to regard the beginning of the second line as occupied by the end of the name beginning in the first line: this would allow us to read the second vocable as simply Ιλλιακος related to such names as *Illius*, fem. *Illia*, for which see Holder's *Altcelt Sprachschatz*, as also for instances of *Illio-marus* and *Illio-marius*: see likewise Ιλλανουιακος in No. xvii. What remains for certain of the first line is ΛΟΥϹ, but immediately preceding the lambda there are traces of a letter which may be Π, but I feel far from certain. Now if λους ended the name in the nominative, which ought here to be the grammatical case, it would be a noun of the *u*-declension; but the chances are rather against a proper name of that declension—still more against two such in one brief inscription—and in favour of regarding the name as ending in the next line.

The treatment here of ου calls for a remark in passing. Before a consonant, as in λους and βρατουδε, it had probably the usual sound of *u*, while in Γρασελουι or Γρασελου it must have been the diphthong *ou̯* or *ow*, unless we are to suppose that it had been reduced in the pronunciation to *ū*. The whole may be represented as follows:—

. . . . . . ΛΟΥϹ
ΟϹ · ΙΛΛΙΑΚΟϹ
ΓΡΑϹΕΛΟΥΙ
ΒΡΑΤΟΥΔΕ
ΚΑΝΤΕΝΑ

And interpreting the last two words as was suggested in the case of No. vii one may render the inscription thus—'////// lusos Illiacos (gave) firstfruits to Graselus by his decree.' The verb *dede* is here left out, but the construction of the sentence is perfectly clear, thanks to the case endings.

The third line giving the name of the recipient of the *cantena* naturally attracts attention in spite of its fragmentary state, for apart from the question as to the ending, the dative is here the centre of interest, because it seems to identify the name of the divinity with that of the spring, whence that of the 'locus nuncupatus Grasellus,' was derived[1]. The nominative would accord-

[1] This relates to Aredius, bishop of Vaison in the seventh century, and the context will be found given in Pertz's 'Monumenta Germaniae Historica, *Diplomata*,' i. 65 (= p. 57). In later times the place became a favourite resort of the Popes of Avignon, but now hardly a solitary cyclist finds his way there. Doubtless this will not always be so, as an enterprising society of Frenchmen has lately been organized to acquaint their countrymen with the beauties of French scenery.

ingly have been Γρασελους, *Graselus*, of the *u*-declension, and as the spring is now *le* Grosel or *le* Groseau the divinity of old was probably a god rather than a goddess. With regard to the change of vowel from Graselus to Grosel it is relevant to mention that I ascertained the fact that the local pronunciation still makes the vowel in question more *a* than *o*. it is decidedly nasal, for the word is sounded *Gra*^{n}*zeu̯*. Possibly the ancient form of the name would have been more correctly written *Granselus* in spite of the *Grasellus* of a later document compare *cesor*, *Masuetus*, and *mesis* for *censor*, *Mansuetus*, and *mensis* in Roman inscriptions frequently. Lastly, when one bears in mind the connexion of the stone with the Roman altar in the ancient chapel of St. John the Baptist, it is natural to infer that the early missionaries adroitly converted the rustic water-god Graselus into the Baptist of their own faith, though the former may have been a distant relative of Apollo *Granus*.

xiv. Saignon. Some four kilometres from the town of Apt, in the Department of Vaucluse, nestles the village of Saignon under the threatening crest of a once fortified cliff, and within the church is a hopelessly mutilated inscription. It is in the wall near the door as you enter, and I found it above the level of my eyes. It appears to have been plastered over for a time, which explains why the editor of the *Corpus* treats it as lost; in fact it is not very long since it was rediscovered by M. Ginestou, the hospitable and learned curé of Saignon. The editor states (*C. I. L.*, XII. p. 822) that the stone was originally found in the gardens of the presbytery about the year 1867, and the reading he gives shows much the same letters and portions of letters that I thought I saw The following are my guesses .—

///ΔBO////IOO
OYEIMATIKAN
AIOTEIKARNITOY

The last letter visible in the first line may be regarded as C or an imperfect O · the *Corpus* has the latter, and indicates that the line did not end with it The I in this line may have been a T with the top imperfect, but I copied it as I. The B seemed imperfect also at the top, but it has the shape characteristic of that letter in our inscriptions, especially those at Nîmes. The *Corpus* marks the Δ as imperfect, which did not attract my attention there is no doubt, I think, as to its identity. The coming together of ΔB is remarkable, and recalls such Gaulish names as Adbogius, Adbucillus, and Adbucietus. Now, AΔBOΓIO- will not fit the lacuna in the middle: probably AΔBOKETO- or AΔBOKIETO- would do better;

but we should want it longer at the end, some such a form as Αδβοκετοουιξ, or else Αδβοκιετος, followed by the beginning of a patronymic genitive ending with the ΟΥΕΙ, let us say, of the second line: this last line ends with a ligature which has to be resolved into ΑΝ. The *Corpus* makes the last limb of the ligature too nearly perpendicular, as if it were Α with an Ι accidentally attached to it. This is possibly the case with the beginning of the third line: it is rather imperfect, but it looks almost more like ΑΙ than ΑΝ, the whole word being as I read it ΑΙΟΤΕΙ or ΑΝΟΤΕΙ. It is right, however, to say that the *Corpus* reading is ΛΙΟΥΕΙ, where we differ as to Τ or Υ, as to Α or Λ. I was not aware of the reading with Υ, and I copied the letter as a good Τ, so far as I can gather from my notes.

To these details of the reading must be added some attempts to interpret the whole. The first word to claim one's attention is the verb καρνιτου or *carnitu*, which occurs also in Nos. xxxiv and xxxvi, where Dr. Stokes translates it by '*congessit*' and 'heaped together.' The tense in *u* is the same as that of *ieuru*, which has been noticed at pp. 277, 288, and the syllable *it* may be compared with that of Latin *habito*, *vocito*, as compared with *habeo*, 'I have or hold,' and *voco*, 'I call.' We have *carn-* left us, which is doubtless of the same origin as Welsh *carn*, 'a heap or cairn.' Thus it would seem at first sight as if we might render the inscription in some such a way as 'Adbogio-u̯ix has here buried Vimatica'; but that will not do, since in the two instances where the accusative is expressed, namely twice in No. xxxvi, it is not the accusative of the person but of the thing. We must accordingly find an accusative of the latter kind in the second line. This leads to two interpretations, in which the digraph ЄΙ has probably to be treated both times as pronounced *i*, as in the case of ειωρου, at p. 286:—(*a*) Without a genitive, one would have to treat *U̯imatica* as a word meaning a grave, or perhaps a pyre, and consider the legend to have run somewhat thus: 'Adbocietou̯ix piled up a *u̯imatica* for Annotis.' (*b*) With a genitive, such as *Mogou̯i* (nom. Mogovios) or Anovi (compare Holder's nom. Annous, Annovos), and a dative Anoti (nom. Anotis: compare Holder's *Annotius*), the rendering would have to run on this wise. 'Adbocietos son of Anovos, piled up a *matica* for Annotis.' The proper names are inserted simply to help to indicate the syntax of the sentence: I cannot make a more definite suggestion, because I do not know whether *uimatican* or *matican* is to be regarded as the accusative, or what either, in case of a decision being made between them, would mean. One might, however, guess that the idea of a funeral pile, if expressed by

a collective feminine *matica* (better in that case *mattica*), would harmonize with the Mod. Irish word *maide*, meaning 'wood, a stick, a staff' It is supposed to come from an O Irish *maite*, for an early combination *mazdi̯o-s*, of the same origin as English *mast* and its congeners see Stokes's *Urk Spr.*, p 203.

I may mention that the curé called my attention to a remarkable benitier in the church · it is of white marble, and its shape suggests to him that it was originally a druidic altar. One of its margins bears an inscription so far effaced that I could make nothing of it; but I was so tired and so afraid of missing my train for Avignon that I hardly gave the lettering a fair trial; so my failure is no proof that it cannot be read

xv. St.-Remy-de-Provence (1). The little town of St.-Remy (Bouches-du-Rhône) is associated with the ancient Glanum, and has in its immediate neighbourhood some of the most interesting of Roman remains, but the inscriptions which I went to see are in the Museum at the Mairie. One of them is on a stele reading as follows see Stokes, No. 11; *C. I. L.*, XII. p. 127.—

OYPITTA
KOCHAO
YCKONI
OC

That is U̯rittacos Elusconi̯os, 'Vrittacos, son of Eluscō or Elusconos.' *U̯rittacos* is a name of the same origin as Ate-u̯ritus, Ate-u̯rita, also At-u̯rita, together with related forms duly recorded in the *Corpus*, XIII 10010. 2096, 2907, and from Ireland may be added the genitive Ape-vritti compare also xxxiii^b below. Of the patronymic Elusconios I have nothing to say

The lettering is comparatively good and quite certain.

xvi. St.-Remy (2). Another stele at St.-Remy has its top broken off, but the inscribed portion of the stone is intact, and the lettering, though ruder than the previous one, is clear enough This, however, does not spare one considerable trouble with the very first name, for it presents a ligature which has not been satisfactorily resolved. As far as concerns the strokes involved, they would be covered by supposing the ligature to have meant NN, but this is unlikely, as the next letter is M, and the whole name would be in that case BINNMOC. The reading adopted by Stokes, No. 10, is BIMMOC, and other authorities have treated it in the same way; but by so doing they omit one limb of the combination. Two other readings are mentioned in the *Corpus*, XII. p. 127, as BIMVMOC and BINVMOC,

both of which introduce a Latin V into a legend which is otherwise all in Greek letters. A less violent conjecture would be to take the M which is there to have had a line joining its two first limbs so as to make it into a ligature for AM, and to assume that this line was overlooked by the inscriber who had not carefully scanned the text given him to carve. The inscription would then stand thus:—

BINNAMOC
ΛΙΤΟΥΜ
ΑΡΕΟC

That is, 'Binnamos son of Litumaros,' Litumareos being a patronymic derived from Litumaros compare Ουιλλονεος in No. vi, pp. 285, 287. Both *Litumarus* and *Litumara* are cited by Holder. *Binnamos* one would possibly have to derive from the same source as Irish *binn* or *bind*, 'sweet of voice, melodious', and as regards the formation of the word compare such Gaulish personal names as Bladamus, Cavvama, Clutamus, Uxama, as to which see *C. I. L.*, XIII 1316, and Holder, s.v. *-amo-*, *-amā*.

xvi[a] The *Corpus* mentions another Celtic inscription which should be at St.-Remy, but the Maire, who is familiar with the antiquities in the local Museum, knows nothing about it he was very ready to assist in the search, but it was all in vain. In the *Corpus*, XII. p. 127, it is given from a manuscript (Romyeu, f. 95 [1]) as follows—ON ΘΟΥΟΤΤΟ ΔΙΟΥΙ · BRATOY. Here the Θ possibly means an O, for that vowel is now and then ornamented with a point in the centre The gap before it may be due to careless copying or else ON is the end of some longer word, the rest of which was illegible or broken off. The second and third Y have been copied as a V standing on a short horizontal line, but the peculiarity is probably due to the copyist. The inscription is imperfect not only at the beginning but also at the end, which was probably *βρατουδε καντενα*, as in the case of the Grosel inscription, which with its Γρασελουι *βρατουδε καντενα* helps one to construe the present one. In fact one perceives at once that *διουι* is in the exact position for a dative, and this proves to be so; for we have only to suppose the not uncommon substitution of *ī* for *ē* and we have *dēu̯i*, the dative of the word *dēu̯i-s* or *dēu̯i*, 'goddess.' In the first Rom inscription I have found the vocative as ΔΕUΙ = *deuui*, which has been read *deei* In Irish we have the word in a genitive *dea* in *Fir Dea*, 'the Men of the Goddess,' meaning the Tuatha Dé Danann, and *dea Dechtiri*, 'the goddess Dechtire's' (Bk of Leinster, f. 123[b]); for *dēu̯i* would yield in early Irish the genitive *deu̯i̯-as*, which according to the prevailing rule in that language had to become *déa* in the course of time.

Further search should be made for this most interesting inscription, beginning with the examination of the Romyeu manuscript, to which the *Corpus* refers.

The *Corpus*, XII. p. 127, places among the Celtic inscriptions one found 'prope Glanum in cippo quadrato iuxta villam quae dicitur *le Mas de Durand*,' which I did not visit, but it adds that the language may be Greek, and the reading given is ///YP/AKΛ/HOC/YЄA, which suggests the name of Heracles, but nothing Celtic as far as I can see.

xvii. Nîmes (1). One of the most remarkable inscriptions in the Museum at Nîmes is one that was formerly to be seen in the temple of Diana: it is stated to have been originally found in 1742 near the great spring which forms one of the most remarkable features of that ancient city: see *C. I. L.*, XII p. 383, *Dict. Arch.* No. 1, and Stokes, No. 7. The letters are here and there imperfect, and in two or three places wholly gone, the *Corpus* produces it accurately so far as it goes, but the *Dictionnaire archéologique de la Gaule*, No. 1, has tried to complete it, and has not done it satisfactorily. To the best of my belief the original was as follows:—

KAPTAPOΞIΛΛANOYIAKOΞΔ⊧Δ⊧
MATP⊧BONAMAYΞIKABOBPATOYΔ⊧

The work of restoring the inscription is rendered comparatively easy by the MS. notes of Dardalhion, dating about 1745. M. Maruéjol kindly enabled me to find them in the public library. The second line is all legible, and the chief lacuna in the first line nearly covers the letters POΞI which Dardalhion's reading supplies. But even the perpendicular of the P can be traced in its proper place, and the lower end of the I is also there: the P has wrongly been guessed to be a B. The top of several of the letters that come later in this line has been damaged, among others that of the Y which Dardalhion has accordingly copied as an I; but as a matter of fact one can still detect the beginning of the fork of the Y on the stone The K of KOΞ is also imperfect, but of special interest is the fact that the lower slanting arm of that letter does not reach down to the ground-level of the lettering as a whole this makes it possible to suppose that the inscription began with a K and not with a gamma as has been usually thought. In any case, whatever it was, it had become very uncertain before Dardalhion saw it and copied it as a doubtful I. This last, however, could not fill the space, and the more fitting character seems to be one of the following, Γ, H, K, Π, P, Y. Without any reason

of special force I have selected K, but I should be glad to see a better case made for any one of the other letters. This was the first inscription I found with the sigma written Ͼ, and I may mention that the E is here formed with its perpendicular protruding in both directions beyond the horizontal bars. Lastly, the sides of the triangle of the delta are produced upwards so as to cross one another and form a forking at the top; the base of the Δ is produced also at both ends and twisted a little upwards. Altogether the lettering is more pretentious than in any of the previous instances. I may add that Dardalhion gives me the impression of being an accurate man, and as an instance I would mention his copy of the delta of BPATOYΔE with a short tag which hangs, as it were, from the middle of the base of that letter· I cannot suppose it, though well defined, to have had any meaning, but anyhow there it is, carefully reproduced by Dominus Dardalhion.

Thus far of the lettering the inscription means 'Cartaros Illanuiacos gave (this) to the Nemausian Mother-goddesses by their decree.' What Cartaros did give was probably the gift of a building in whose wall the inscribed stone was inserted or else some gift which was not intended to be separated from the stone. *Cartaros* I should refer to the same origin as the plural *carti* in the first Rom inscription, where I have conjectured that it means strong or powerful (*Celtae*, p. 108). *Illanuiacos* has been treated by Dr. Stokes as the genitive of *Illanoviax*, but I am not sure of the existence of such genitives in Celtic, and it seems preferable to regard Ιλλανουιακος as an adjective agreeing with Καρταρος, and so with Ιλλιακος in No. xiii. What may have been the precise force of formations in -ακος when used in this way I am unable to say. Holder supplies related names in *Illanuissa* and *Illanuo*, gen. (Latin) *Illanuonis*, which he dates at Cologne in the first half of the first century of our era. *Dede* we have had in No. vii, and as to *matrebo* that corresponds to Latin *matribus*, while the feminine adjective derived from *Namausos* has its dative plural answering to such Latin forms as *dominabus*, *filiabus*, and the like. *Bratude* we have had before, and both times with the dative coming immediately before it see also xxii.

xviii Nîmes (2). A stele found in the city in 1876 has the writing on two contiguous faces of the stone, and so placed that each line is partly on one face and partly continued across the edge on the other face, an arrangement which the *Corpus* seems to suggest in the case of a Latin inscription at Nîmes, namely XII 3656: I do not recollect having noticed either this or No. 3964. The

reading of the present inscription is as follows · see Stokes, No. 8, and *C. I. L.*, XII. p 383 .—

KACCI|TAΛOC
OYEPCI|KNoCΔ
EΔEBP|AToYΔ
EKANT|ENA·ΛA
MI·EINO|YI

The lettering reminds one of that of the one from Apt see No. xi above It has the square sigma derived from Σ as is indicated by the protrusion of the two horizontal lines a little behind the perpendicular, which is especially visible as a kind of heel at the bottom. The koppa form of the P in that inscription has here become a simple loop on a stem. On the other hand, one is reminded of the Saint-Remy inscription from Romyeu's copy by the fact that here the upsilon tends to take the form of Latin V, from which it is, however, distinguished by the horizontal finish of the Υ being retained. Dr. Stokes ends his reading with the ΛA of the fourth line, and adds that the rest is 'almost certainly wrong.' It is repeated, however, in the *Corpus*, and is right except that it ends with ΥII the last of which is not a letter but an accidental scratch At any rate that is what it seemed to me to be, and I thought I found a point before ΛA and before EINO. It looks as if the author of the inscription treated the familiar sequence *dede bratude cantena* as requiring no punctuation, and as if he reserved it for the part which was special to this case, Λαμι Εινουι. Lastly, I ought perhaps to mention that in the *Corpus* the O of OYEPCI and of ATOY is provided with a little tag sticking out of the highest part of the circle of that letter. This should be the apex it escaped me, and I do not understand what it can have meant, at all events in the former instance

There is room here for the same doubt as to the pronunciation of the two syllables *ουι* as in No. xiii (p. 301), that is, whether they were sounded *ui* or *oụi*. But in either case the word would be an instance of a dative corresponding to which the nominative must have been Εινους or *Einus* of the *u*-declension, which draws no distinction between masculine and feminine. It is of obscure origin and meaning, but we have possibly a kindred form in *Ino*-reixs, cited by Holder, and especially in Sp(urius) *Inus*, and in . . INOVCI . Δ(εδε) which he cites from the same part of France. Εινουι should be an adjective qualifying Λαμι, unless they are the names of two different persons, between which we should naturally insert a conjunction. So we come

to Λαμι, and that is somewhat more promising. The nominative should have been either Lama or Lami-s the latter would be epicene while the other would probably be exclusively feminine. In either case one is reminded of the Latin and Greek *Lamia* 'a witch, a bugbear, a blood-sucking monster' From Benwell near Newcastle-on-Tyne we have an ancient inscription of a delightfully brief character LAMIIS ❦ TRIBVS (*C. I. L.*, VII. 507) which one is tempted to render 'To the Witches Three,' such witches as the weird sisters whom Shakespeare pictures meeting Macbeth. However, the word *Lamia* is less simple than *Lama* or *Lamis*, for either of which it would fit as a derivative. If we are to look for an Aryan etymology for these names, one would be inclined to compare the Goidelic deponent verb *lamiô*-r, 'I dare,' ru-*laimur*, '*audeo*,' ni con-*laim*emmar, '*non audemus*,' and the Welsh *llaf*asu, 'to dare': see Stokes's *Urk. Sprachschatz*, p. 240, and Zeuss's *Gram. Celtica*, pp. 7[a], 438[a]. *Cassi-talos* is analogous to *Danno-talos* and other compounds with *talos*, supposed to mean brow or forehead. Dr. Stokes has treated it as meaning 'fair-brow,' as suggested by M d'Arbois de Jubainville; but the meaning of *cassi-* is not at all certain. *Uersicnos* is a patronymic signifying 'son of Versos,' but the etymology of the latter is obscure. Dr. Stokes compares Sanskrit varshīyas, 'upper,' and other words supposed to be cognate with it. Without going into these details the inscription may be rendered 'Cassitalos son of Versos gave first-fruits to Lamis Einus (or Lamis and Einus) by her (or their) decree' Taking them to be two, I should not suppose them to be of the class of Mother-goddesses, for in the latter case they should be three rather than two. So one would have to treat them either as a god and his paredra or, better, as a goddess and her son. Lastly the Irish man's name *Mug-Lama*, '*Servus Lamiae*,' decides, by means of its genitive *Lama* (= Early *Lamy̆as*), for *Lamis* as against *Lama*.

XIX. NÎMES (3) On a small piece of brick-like substance in the Nîmes Museum is the following fragment: see Stokes, p. 64, *C. I. L.*, XII. p. 833:—

MBATI
TOOY
TIN

The M is mostly gone, so is the T in the second line, and somewhat less so in the last line, which ends with N, and not M as it has sometimes been represented. The second line suggests TOOYTIOYC, so the inscription was probably Celtic.

xx. Nîmes (4). Another Nîmes inscription, now in the Museum, reads as follows. see Stokes, No. 9, and *C. I. L*, XII. p. 383 :—

ЄCKIΓΓO
PЄIΞKO
NΔIΛΛЄ
OC

That is, 'Escingorix son of Condillos' it was probably his tombstone. The stone is a narrow one about a yard long with the top rounded. The lettering is clear and well cut. Note that here ει was probably pronounced ī, and compare No. vi (p. 286) Celtic ρειξ is probably to be everywhere pronounced *rīx*, genitive *rīgos*.

The man's name should mean king or leader of *escingi*, and the latter word, according to M. d'Arbois de Jubainville, should mean the warriors who sally forth to attack the enemy. Escingos was a fairly common name and it stands for *Ex-cingos*: see p. 292. *Condillos* should be a derivative from some such a name as *Condos* of which Holder gives instances

xxi Nîmes (5). A fragment of a vase found at Nîmes is now in the Museum, and shows a nearly illegible inscription which may possibly be Celtic: this is my copy of it.—

MATIACo . . . .
KONNoYBP . . . .

But I must explain that of the first letter there is hardly any more left than would cover a lambda. Then the TI are somewhat doubtful, and may perhaps be Π; the A following is also doubtful, and the C is very open, having in its bosom what may be a small o though it looks more of the shape of a D. So the whole line may have been ΛATIACO or ΛAΠACO, but I prefer the former guess. As to the second line, what I have transcribed NN has this appearance, ΓΓ, and I know not what to make of the character except a sort of exaggerated Etruscan N: possibly it may be a gamma The letter following the B has the appearance of the little triangle forming sometimes the top of a P, but I could not trace the stem below and detect there another βρατουδε. After KONNO or KOΓΓO, I thought I saw a small point, but it was too low in the line to have, I think, been intended. I have not succeeded in finding this fragment in the *Corpus*; but it somewhat reminded me at first of No. 5885 Ad. on a stone found near Collorgues (Gard). The editor gives it as ΛAΠAO KOΛΛOYPΓ, and suggests that it is a factitious production intended for the glory of Collorgues.

xxii. Nîmes (6). At St.-Côme or Cosme, near Nîmes, was found, in 1886, a fragmentary inscription, which is now in the Museum there: see *C. I L.*, XII. p. 833. It reads as follows with the first portion of both lines gone, perhaps one third of the whole.—

. . . . . . ΑΔΡΕΣΣΙΚΝΟΣ
. . . . . . ΥΙΒΡΑΤΟΥΔΕΚΑ

Whether ΚΑΝΤΕΝΑ was written in full one cannot say, but the formula coincides partly with that of xvii (Nîmes 1), and more closely with that of Le Grosel, No xiii, for it has κα(ντενα) and may have had δεδε also. The ΥΙ is doubtless the end of a dative in ουι or οουι of the name of the divinity to whom the gift was made what that name was one knows of no means of discovering. The lettering is very like that of the former inscription it has not only the same Β but also the same Κ and Δ the curl at the ends of the base of the Δ is here to be detected also in the Α.

Adressicnos means the 'son of Adressos,' a name which seems to claim kinship with such forms as Reso, Ressius, and Ressi-māros, which appears to be the same name that is found written also Redso-māros: see Holder's instances.

xxiii. Nîmes (7). A stone similar in shape to that of Escingorix, No. xx, except that the top is hollowed, is to be seen in the Museum, and reads simply ΚΡЄΙΤЄ in clear letters. Holder refers it to Redessan in the Department of Gard, and adds that it dates not before the second half of the second century of our era. It recalls the Irish woman's name *Créd*, from which another female name, *Créide*, seems to be a derivative see O'Grady's *Silva Gadelica*, i. 111, ii. 498.

xxiv. Nîmes (8). An inscribed stone was discovered more than twenty years ago in the wall of the hermitage of Notre-Dame-de-Laval, near Collias (Gard), and is now in the Nîmes Museum. See Stokes, No. 13, and *C. I. L.*, XII. 5887, where two readings are given, the better one runs as given here in the margin, with the initial character represented as a ligature consisting of a reversed Ǝ and a Κ. the reading is M. Rochetin's now he and M Germer, the discoverer of the stone, satisfied themselves that they found ΟΛΙ in the first line I am not quite able to understand, unless they were in some way influenced by the name of *Collias* This version has been improved by M Maruéjol, who has coloured the lettering on a cast which is placed near the original in the Museum it runs as in (2), except that the character be-

(1)
ƎΚΟΛΙΟ
CΡΙΟΥ
ΜΑΝ
///ΑΝ
///Ο///
ΝΑ//ΟΔ
ЄΔЄ ΒΡΑΤΟ
ΥΔЄ ΚΑΝ
ΤЄΝ//

tween the initial ligature and ΛI is rather a nondescript filling the lacuna which I leave there. I examined the inscription with great care, and found that I was almost in agreement with him, excepting as to the first line which I will leave alone for a moment. I am not convinced that the Є at the end of line 3 is there, and in any case you have to look for it over the edge, while at the beginning of the next line I detected an I. Here the inscriber has given us the neuter singular *καντεν*, not the plural *καντενα*: compare No xxiv[b] and such forms as Latin *nomen*, plural *nomina*. Thus far our difference attaches to the patronymic, which I regard as being PIOYMAN|IOC, while M. Maruéjol reads PIOYMAN|Є|OS. I prefer PIOYMANIOC, and render it 'son of PIOYMANOS,' that is Riumanos. To go back now to the first line, I cannot improve on the suggestion that it

(2)

(1) ƎK//ΛIO
(2) CPIOY
(3) MANЄ
(4) OCAN
(5) ΔOOYN
(6) NABOΔ
(7) ЄΔЄBPATO
(8) YΔЄKAN
(9) TЄN

begins with a ligature of ƎK: it might possibly be ΞK for ΣK, but that is not probable. Next comes a combination which baffled both M. Maruéjol and me, but since then I have come across it in the thirteenth volume of the *Corpus*, namely, in No 5465, in the Dijon Museum. The editor suggests the values N, NI, or IXI, but, it is so situated, that it seems there to mean NI. The name in the inscription seems accordingly to read DASILLINI, but the whole has unfortunately not been interpreted. The combination consists of an N with a long diagonal, and with an I bisecting that diagonal at right angles, with the result that the whole looks rather like IXI, though it really means N̸ = NI or IN. In the Dijon instance, the value required appears to be NI, while in ours that of IN seems to fit better. The letter which follows is so faint that I have not made it out with any certainty: it may be another N tagged on, or merely an I. So the name would be EKINNOC or EKINIOC; but if M. Maruéjol should prove to be right in reading ΛI, the spelling would have to be regarded rather as EKNIΛIOC. From the ingenuity spent on the carving of the name, it is highly probable that the inscription was cut by the bearer of that name with his own hand. The name, if we have it approximately correct, suggests kinship with that of the ancient Eceni of East Anglia, called *Iceni* by Tacitus. The inscription will now stand as in the margin on p. 313. That is Εκιννος Ριουμανιος Ανδοουνναβο δεδε βρατουδε καντεν which means—'Ecinnos son of Riumanos gave firstfruits to the Andounnas by their decree.' Enough has already been said of the uncertainty of the first name, but the patronymic has as its first element *riu*, standing

perhaps for riu̯o, to be identified with the name of the god Riu̯os in the Coligny Calendar the etymology is obscure, but see *Celtae*, p. 104 *Andounnabo* is a dative plural feminine like *Namausicabo*, and is probably the name of a group of Mother-goddesses. Holder, under Riumanos, gives a reading differing from the others—Εκιλιος Ριουμαν[ο]ς Αντουνακο[ς] δεδ[ε] βρατουδε καντευ[α]—which, besides other slips, fails to name anybody as recipient of the offering, but under *Andounnăcos*, which is more correct than his later Αντουνακο[ς], he explains the former as meaning, 'aus Andaon, j. Ville-neuve-lès-Avignon' This Ville-neuve is the once flourishing town which, from the cliff of Avignon or the Rocher des Doms, as it is called, you see over against you on the other side of the Rhone. It is hard to avoid the inference that it derived its older name of Andaon from the Andounnas, or else that the goddesses derived theirs from Andaon

(3)

ƎK N/////O
CPIOY
MAN
IOCAN
ΔOOYN
NABOΔ
ЄΔЄBPATO
YΔЄKAN
TЄN

xxiv[a]. Before leaving Nîmes I may mention one or two inscriptions which I did not succeed in discovering. One of them is represented in the *Corpus*, XII. p 383, as being 'in vinea Guirandi notarii,' and as reading simply $\begin{smallmatrix}\text{KATO}\\\text{VAΛOC}\end{smallmatrix}$. Here the Latin V looks out of place, but if we suppose it to stand for Y one would at first sight perhaps expect OY, making the whole name into KATO-OYAΛOC, but very possibly we have to pronounce the name as Catu̯álos, with the accent moved on to harmonize with the Gaulish general rule of accenting the penultimate. That would explain the shortening of *Catú-u̯alos* into *Cat-u̯álos*, as it does in the case of the *Catvallauna* cited by Holder from South Shields, s.v. *Catuvellauni*. Compare such forms as *Atpílos* from *Atépilos*, *Adbogios* from *Atebogios*, *Adgennorix* from *Atégennos*, and similar instances which were doubtless comparatively late, as otherwise the assimilation of *tp*, *tb*, *tg* would have been pushed a step further. Contrast *Ucuete* (p. 278 above), with its *c* for etymological *dg*. The whole list of Gaulish names requires to be carefully examined from the point of view of their accentuation an excellent beginning was made in 1901 by Meyer-Lubke in the transactions of the Vienna Academy see *The Englyn*, p. 6. In Celtican the tendency was probably in the contrary direction, resulting in *Cátu̯alos*, and the like. The name of which this inscription consists is in Mod. Welsh *Cadwal*, and in Irish *Cathal*.

xxiv[b]. Lastly, the *Corpus*, XII. p. 383, has a facsimile of a copy published of an inscription in the *Histoire de l'Académie Royale des*

Inscriptions (Paris, 1743), vol. xiv. p. 106, plate I. The inscription was found *ad fontem* at Nîmes, and it is now unknown; but even when found it seems to have been broken off at both ends, for the copy reads as follows.—

YIIƆY Ь EOYLO
OYAB DEΔEΛL
OYAEF.ANTEN

Evidently the copyist was not much used to Greek letters, so he dropped off into the Latin equivalents every now and then, as in the D and the L, whereas the lambda after DEΔE probably stands for an A. The first line is rather hopeless · what his inverted C meant is hard to say, or his Ь, unless it was an O with the apex. One would like to have known whether his OYAB was not followed by a small o ending a dative plural feminine like *Andounnabo* or *Namausicabo*. The point in the third line cannot have been a part of the original inscription, and the F represented preceding it must have been K with the two short arms characteristic of that letter in some of these inscriptions. This was by no means an unnatural error for him to make, that is, to suppose it an F, though the original seems to have been KANTEN as in No. xxiv. From this we know where we are, and how his OYAE has to be corrected into OYΔE as the latter part of BPATOYΔE. If the manuscript facsimile of the inscription still exists, it should be closely scrutinized in case it contains something which the printed version fails to suggest.

What can be made out here seems to supply us with another variant of the formula with the words *dede*, *bratude*, and *cantena*, for here we appear to have the recipients' name placed just before *dede*, while the nominative to that verb seems immediately to follow giving the donor's name beginning with *al*. We have no means of completing the name: we are not much better off in the case of the recipients' name, but if one may venture to regard their name as ending in the dative plural feminine, they may be supposed to have been Mother-goddesses. In any case the length of the description of them would offer no serious difficulty, as they may have had more than one epithet applied to them, not to mention the possibility of their being associated with a god whose name stood as the first word of the dedication.

xxv. GUÉRET. Guéret is the chief town of the Department of La Creuse, and in the Museum there, or rather outside it in a place used by workmen, we found after a long search an inscribed stone said to have been discovered in 1864 at Sazeirat, not far from Marsac in the same Department: see the *Corpus*, XIII. 1452, Stokes, No. 19,

and the *Bulletin Épigraphique*, 1881, p. 38. The inscription reads as follows:—

SACER PEROCO
IEVRV DVORI
CO. V. S. L. M

The first part is Gaulish while the latter is Latin, which, written in full, makes *Votum solvit lubens merito*, and suggests that we have here to do with a dedication to a god. The Gaulish portion has been interpreted in more than one way —(1) Pictet and Stokes have rendered it 'Sacer Peroco made (these) porticoes,' which makes an accusative of DVORICO, but if an accusative plural it should have been DVORICA, and if singular it should have been DVORICON. There is also another kind of objection to this rendering, namely, that it fails to name the divinity to whom the dedicator paid his vow. Here *Sacer*, probably borrowed from Latin, is taken with *Peroco* as describing one and the same man, which implies, and, as I think, rightly, that *Peroco*, of obscure origin, is a nominative of the *n*-declension which would have been *Perocon-os* in the genitive. (2) By taking *Peroco*, however, to be the dative of a *Peroco-s*, and treating it as the god's name, one might translate it 'Sacer made for Perocos this *porticum*.' Here there is the same grammatical objection to DVORICO as an accusative, not to mention that the severing of *Sacer* and *Peroco* seems somewhat forced. On the other hand it has the merit of not leaving the god without a name. (3) But it occurred to the French epigraphist, M. F. Vallentin, that DVORICO is the god's name in the dative case. Assuming that to be right, the sentence construes without a hitch, 'Sacer Peroco made (this) for Du̯oricos' It seems impossible, therefore, to accept either of the other translations. The inscribed stone was probably inserted in the wall of the building made for the god, and that building was possibly no other than a portico: witness *C. I. L.*, XIII. 2872, where we have 'Deo Moritasgo porticum poni iussit.' Only in the inscription before us there is no word for *porticum*. *Du̯oricos* was the name of the god himself.

Duorico comes from the same origin as Breton *dôr*, Welsh *dôr*, a feminine meaning a door, that is the means of closing and opening a doorway, as the English word itself, and its congeners German *thur* and *thor*, Latin *foris*, 'out of doors,' Greek θύρα, 'a door.' More interesting still as retaining the *v* are such forms as Old Bulgarian *dvĭrĭ*, 'a door,' and Sanskrit *dvâra*, *dvâr*, *dur*, of the same signification. From *du̯or* we have the Irish *dorus*, Welsh *drws*, which mostly means the opening which is shut by means of a door, sometimes the door itself. These seem to postulate a *du̯orosto-n*, not *dvorestu*, which will

not explain the Welsh form The latter part of *duorosto-n* would seem to consist of a vocable of the same origin as Latin *ostium*, and to have been accented in early Brythonic *duorósto-n* or *duorostó-n*, for *duórosto-n* could hardly yield *drws* in Welsh

Within an enclosure inside the Museum, and so fenced that it could not be opened, we saw a Latin inscription which seemed to read BODOCENVS FILI E//BROT ...., but one could not get near enough to be sure whether one should read FILI with a small I in the bosom of the L or FIL only. The letter between E and BROT also eluded my attempts to fix it I mention this stone as I have not stumbled across it in the *Corpus*. One may add that this little Museum requires to be reorganized it would be easy to make the inscriptions more accessible and far more safe.

xxvi VIEUX POITIERS. Leaving Poitiers by a train going to Tours, we got out at a station called Les Barres, and crossed the Clain. Then we walked some two miles, or less, down its right bank until we came in sight of Vieux Poitiers, and found the stone we wanted standing in the middle of a field to our right, and about a quarter of a mile from the river, which was to our left. A short distance further the Clain empties itself, we were told, into the Vienne. The stone is Stokes's No. 14, and in the *Corpus*, vol. XIII, it is No. 1171. it reads as follows —

RATN BRIVATIOM
FRONTV TARBEISONIOS
IEVRV

Among the peculiarities of the lettering may be mentioned that the I of RATIN consists of a prolongation upwards of the first perpendicular of the N, thus N; the VA of Brivatiom form a ligature, the NT consist of N with its second perpendicular provided with the top stroke of T, the E in both instances is peculiar, being E, and the IO consist of a little O, with a little I standing on the top of it. Let me add that certain of the letters are damaged: thus there is a hollow extending irregularly from the middle of the first T to the N following, and this has been construed into a sort of horizontal I by the readers who have missed the real I as part of the ligature for IN. After RATIN comes another horizontal hollow, where there may have been a mark of punctuation, but I could not detect one, and I imagine the hollow was there before the writing and that it was the excuse for a longer space than usual between *ratin* and the next word. The top of the second I of Brivatiom is slightly damaged. At the right-hand top of the V of Frontu, there is a hollow which can hardly be regarded as

a mark of punctuation, though Hirschfeld gives us one thereabouts, but he appears to have only studied a cast of the stone, and the result is not satisfactory Where I thought I found ISON, he prefers L with a little S in the bosom of the L and followed by a little O, that is Lso The lettering is damaged here, but I thought the SO of the usual size. The previous I is unusually close to the preceding E. What follows *Tarbeiso* looked, at first sight, a ligatured A and V, but on examining it I thought the connecting groove too low to make an A, and it slants in the wrong direction. I came to the conclusion that the letter is only a damaged N.

The whole is in stressed hexameter, and scans as follows —

Rátin Bri|u̯átio̯m | Fróntu | Tarbeis|ónio̯s i|éuru.

It means, 'The ráth for the bridge people Fronto son of Tarbeiso made' To take the words in their order *ratin* is the accusative of a word *rāti-s* or *rāti* of the masculine or neuter gender, which is proved by the adjective *Briu̯atio̯m*, which is in concord with it. The word means a fortification of some kind, as in Irish the word *ráith* or *ráth* meant mostly a place surrounded by an earthen rampart. The Welsh is the *rhawd* in bedd-*rawd*, bedd-*rod*, 'a tomb *ráth* or sepulchre,' and gaeaf-*rawd*, which seems to have meant the place where things were stored for use in *winter*. *Briu̯atiom* has an unexpected final *m* for the usual *n* the modification has been explained (see Holder, s. v.) as due to the following *f*, though the inscriber has not been consistent in having carved *ratin*, and not *ratim*, before Briu̯atiom. However, the nasal has not the same sound before *b* and *f* in the former it is *m* with the lips closed, while in the latter it is neither *m* nor *n* but a dentilabial, formed by bringing the upper teeth in contact with the lower lip. It is possible, however, that *f* was pronounced as a bilabial in Gaulish, so that the nasal before it would also be a bilabial, that is an *m* as in this case. The adjective Briu̯at-io-m is derived from Brīu̯-at-es, 'people who have to do with a bridge or bridges or live near them, men who have to guard them.' The locality on the peninsula, between the Vienne and the Clain, is suggestive of bridges we found to our inconvenience that the lack of one at a suitable point forced us to go back the way we had come. There is nothing to suggest that the fortification was immediately connected with any one bridge it was rather, I imagine, to be of service to those who lived in a locality which depended much on its bridges, probably several bridges on the two rivers. The longer word is derived from Gaulish brīu̯a, of the same origin and meaning as the English 'bridge'. compare Old Bulgarian brŭvĭ, 'a brow, a bridge.'

Frontu is the Latin name *Fronto*, borrowed: it is not certain either that *f* was a sound which occurred in native Gaulish words; in the few Welsh words of native origin *f* (now written *ff*) seems derived from *sp* or perhaps rather *sp'h*: compare the Welsh feminine *ffer*, 'ankle,' Irish *seir*, acc dual *di pherid*, of the same origin probably as Greek σφυρόν of the same meaning, and see Stokes, *Urk. Spr.*, p 301. *Tarbeisonios* would seem to be derived from *Tarbeisō* or *Tarbeisonos*: compare the place-name Tarvīsium, Tarvīsus, cited by Holder as being now Treviso, in Venetia. In any case the *ei* of *Tarbeisonios* was probably pronounced *i*, the way for the digraph having been prepared by such spellings as that of ειωρου, and *Drutei* and *Druti* side by side in Roman letters: see Nos vi and xxxvi. Lastly, the value of the *b* in Tarbeisonius is not certain. It may have had either the ordinary sound of *b*, in which case one could not compare the name with any derivatives of the Gaulish taruos, 'a bull', but B may have been introduced here for V, as frequently done in late Latin: compare *gobedbi*, p 280 above, and *Dibona*, p. 367 below.

xxvii. Paris. In 1710 there were found beneath the quire of the Cathedral Church of Notre Dame four altars, which are now in the Museum of the Hôtel de Cluny: see Stokes, No. 26, and *C. I. L.*, XIII. 3026. Following the order in the *Corpus*, the inscriptions are as follows, beginning with Altar 1.—

Front.	Back.	Right side of Jove.	Left side of Jove
TIB · CAESARE · AVG · IOVIOPTVM// MAXSVMO · SVO NAVTAE · PARISIAC/// //VBLICE · POSIER// · N//	EVRISES	SENANI VSEILO///	(traces of lettering)

This may be read with the abbreviations expanded: 'Tiberio Caesare Augusto Iovi optumo maxsumo su*mmo* nautae Parisiaci publice posierunt'; that is, When Tiberius Caesar was Augustus the mariners of Paris for Jupiter the best, greatest, and highest, set (this altar) up at the public expense. The ends of the lines are imperfect, for instance, the O ending *optumo* is gone. The next line seems to end with SV, with a little O on the second horn of the V. This is also the reading in the *Corpus*, where, on the other hand, no indication of the S is given. the letters SVO, written as above, stand probably as an abbreviation of SVMMO—nobody suggests *suo* as 'their own' The final I of *Parisiaci* is gone, and the initial P of *publice* in the next

line, which ends with a V, of which only the upper ends remain now visible. The NT followed below, but the T is gone, the stone having been broken off close to the N the latter is preceded by some hollows, one of which looks like the punctuation mark ᵥ, but inverted. The other imperfections of the lettering on this face need not be dwelt upon. Next as to the opposite face, the tops of all the letters there are gone, but the reading EVRISES is hardly to be doubted. The side to the right of Jupiter, that is, the side on the reader's left hand, has *senani*, followed by another vocable which is partly illegible, the letters SE and O being almost gone, but the lower part of the E is still visible the other two letters would fit perfectly, and that such was the reading rests on evidence, which is referred to in the *Corpus*. The reading of the last letter as M requires to establish it more expert evidence than we have, and I am disposed to think that it must have been either NI or intended to be. The whole would then be *Senani Useiloni*, whatever that should prove to mean.

The inscription on the front of the altar occupied no fewer than six lines, while the others consisted of one line each, but the space was filled by a number of figures illustrating the legend, as one may suppose, in each of the three instances. Dr. Hirschfeld describes those under the heading of *Eurises* in the following terms .—'Homines tres barbati pileati cum peltis et lanceis, unus (ad dextram) praeterea manu dextra circulum gerit.' This *circulum* is described to me by M. S. Reinach as a hoop representing possibly an offering in process of being presented to the divinity's temple, and the conjecture is borne out by a photograph with which M. Reinach has kindly favoured me. The figures under *Senani Useiloni* Hirschfeld speaks of as 'Homines tres mutilati, medius cornutus videtur.' And those under the lost heading as 'Homines tres imberbes pileati cum scutis et lanceis, unus (ad sinistram) paene deletus.' Take the word *Eurises* first, which seems to imply a nominative *Euris* or *Eurisi-s*; but the medial *s* here may stand for an earlier *ss* from $x = cs$, as it almost certainly does in *Useiloni* · compare also *Alisia* in No. ii, and *Esanekoti* for *Exandecotti* in No. xxxiv. We should have in that case to operate with *eurix*, genitive *eurixos*, nom. plural *eurixes* compare the plural in *-ixes* of the name of certain goddesses cited by Holder from the neighbourhood of Como, and perhaps such forms as *Durotix*, *Calitix*, and the like, which he gives under *-ix*. Now *eurix*, *eurixos* would correspond exactly to the Welsh *eurych*, 'a worker in gold, a goldsmith, a worker in any metal, a tinker' The word is so come down in respectability that it is oftenest heard now in the colloquial saying *fel dau eurach*, 'like two tinkers,' which

is said of two persons quarrelling with great wealth of abusive oratory. For *eurych* sounds in Welsh like a plural, so a singular *eurach* has been made for it, from which in its turn is formed the contemptuous plural *eurachod*. More to the point here, however, is the fact that the first syllable of *eurych* inevitably recalled the Mediaeval Welsh *eur*, 'gold,' borrowed from Latin, as is also Irish *ór*, 'gold,' and that the similarity, though due perhaps to accident, suffices to account for the meaning of goldsmith coming sooner or later to be associated with *eurych*. Discounting the gold accordingly, we get left as the original meaning that of worker in metal. The direction, also, in which to look for the etymology of *eurych* and *euris(s)es* will be found indicated by the verb *i-eur-u*, ει-ωρ-ου, meaning 'ἐποίει, *fecit*, made,' already noticed more than once. see pp. 278, 286, 288 above Here the ι-, ει- has long since been marked off by Stokes as a prefix or preposition. See his *Celtic Declension*, p 61, also the *Comptes rendues de l'Académie des Inscriptions*, Décembre, 1880, where M. Mowat shrewdly cites the Latin *urna*, and compares *fictilia*, 'pottery,' from *fingo*, 'I form, fashion, make.'

If we have sailors and artificers mentioned and figured on this altar, the probability is that the other faces of it also represented some leading groups of the citizens of Paris in the time of Tiberius. But what is one to make of *Senani Useiloni*, supposing that to be the best reading? Dr. Stokes would connect the second of these words as *useilom* with Gaulish *uxellos*, 'high,' in Welsh *uchel*, and in Irish *uasal*, 'high-born or noble.' There is another possibility, and it is that the Parisii had borrowed the Latin word *vexillum*, which under the Gaulish accentuation they may have shortened from *uexillo-n* into *uxeilo-n*, and made to serve as the basis of a derivative, *uxeilóno-s*, plural *uxeilón-i*, with approximately the same meaning as the Latin term *vexillarii*, and having its *ei* pronounced *i* as in *Tarbeisonios* and ειωρου, pp. 286, 310, 318. In that case possibly *senani*, derived from *seno-s*, 'old,' may be treated as meaning veterans, and the whole, in a quasi military signification, as the veterans who were under the *vexillum*, or flag. In any case one should notice the absence of any trace of horses. If one, however, connect *useilom* rather with *uxellos* (better *uxelos*), 'high,' the interpretation would, perhaps, be 'aged men or veterans of high birth.' It is needless to say that, as to these Paris groups generally, what has been here suggested is mere conjecture.

It seems, at all events, beyond doubt that *Euris(s)es* is no kind of a verb, and that the three words here in question were not intended to form any kind of sentence, though the contrary has sometimes been

supposed. Taking the three more or less legible faces of the altar into account together, one notices that the first with the longest legend is in Latin, while the two others are Gaulish · in that sense the altar is bilingual, and the author of the inscriptions must have been conscious of the fact.

xxviii. Paris, Hôtel de Cluny, Altar 2 —

Front.	Back.	Right side of Jove.	Left side of Jove.
IOVIS	TARVOS ▿ TRIGARANVS ▿	VOLCANVS	ESVS

There is nothing much to say about the lettering, except that it has been tampered with by some modern idler, who has made IOVIS into LOVIS, that is, I suppose, *Louis*, and also added an oblique line to the back of the E of *Esus*, which makes it look somewhat like *Vesus* the object is not apparent.

It is not evident whether the author of these headings regarded IOVIS as Latin or Gaulish; for the Gauls may have inferred from the oblique cases (genitive *Iovis*, dative *Iovi*, accusative *Iovem*) a nominative *Iovis* for use in Gaulish. In fact a nominative Jovis was not unknown in Latin itself; and if we treat Jovis here as meant to be Latin rather than Gaulish, we have a sort of parallelism with the previous altar, where the face assigned to Jupiter is inscribed in Latin and two others in Gaulish.

Taruos was the Gaulish for bull, a noun of the *o*-declension, and *trigaranus* appears to be a compound adjective meaning 'with or having three herons' in reference to the three birds standing on the bull. *Garanus* is to be equated doubtless with the Welsh *garan*, 'a heron or crane,' and we learn from the ending in *us* that it was a noun of the *u*-declension as was also the name of the native god *Esus*. Add to this that Volcanus had probably been taken over into Gaulish, and treated simply as another noun of the Gaulish *u*-declension; had the dative occurred, that form would most likely be *Uolcanoui*, with which may be compared Μαρεοουι, dative of Μαρεους for Latin *Marius*: see p. 294 above

This altar, like the previous one, has figures beneath the names, under the first of them a half-nude Jupiter holding a sceptre in his left hand, while an eagle is to be seen to his right near his feet Under the second, one finds a bull adorned with a 'dorsuale' and having three cranes standing on him among the leaves of a willow tree, one on his head, one on his flank, and another near the root of the tail; the first two look forwards and the last one backwards Volcanus is represented standing helmeted, with a hammer in his right

hand, and a forceps in his left, and Esus is a woodcutter grasping with his right an axe, with which he is hewing away at a tree of the same kind as the one extending over the bull and the cranes. In fact it appears to have been meant as a portion of the same tree, which is rendered probable by an altar discovered in 1895 on the left bank of the Moselle, now in the Museum at Treves. This was first pointed out by M. S. Reinach in a brilliant article on 'Tarvos Trigaranus' in the *Revue Celtique*, xviii 257, plates. There he describes one side of the Treves altar as showing a willow among whose branches figure a bull's head and three birds with long beaks, while below appears the woodcutter hewing at the trunk of the tree. His name is not there given, and it may not have been Esus, but M. Reinach suggests that the Parisians of the time of Tiberius identified their Esus with the hero of a lost story once widely known about a cosmic tree whose foliage threatened to deprive the world of the light of the sun. The bull, the cranes, and the willow suggest a river divinity; but these also may, without losing their local importance on the banks of the Seine, have been fitted into the wider story familiar to the Parisians who set up the altar.

In the ensuing *Revue Celtique*, xix. 245-50, M. d'Arbois de Jubainville advanced some parallels to prove that the story in question is substantially no other than the Irish epic tale of the *Táin Bó Cuailnge*, which may now be studied at length in Prof. Windisch's elaborate edition.

xxix. Paris, Hôtel de Cluny, Altar 3:—

Front.	Back.	Right side of Cernunnos.	Left side of Cernunnos.
[C]ERNVNNOS	CASTOR	[Pollux]	SMERT[VLL]O[S]

What remains of the lettering presents nothing which requires explanation, but some of the letters are now illegible, and the tops of many of the others are gone. To begin with CERNVNNOS, the C is now all gone, and the bottom of the E is all I could trace of that letter. The left limb of the V is also hard to trace, and there is very little of the final S still visible. The tops of the ST are imperfect, and where Pollux's name should come there is now nothing legible. The tops of all the letters of the remaining face are damaged. The SM are imperfect, and as to VLL I could make those letters fit exactly, but I could not say that I saw them, and the same may be said of the final S. In spite of the bad condition of these inscriptions, the reading of three of the names rests on evidence which to all intents and purposes makes them certain.

As in the former instance, it is doubtful whether the inscriber was conscious of writing anything but Gaulish, for Castor had probably been borrowed from the Romans, while Cernunnos and Smertullos were in any case non-Latin and retained the Celtic ending in *os*. It would have been interesting to know what form the name of Pollux assumed in Celtic. Underneath CASTOR is the figure of a helmeted youth wearing a *lorica* and carrying a lance in his left hand: to his right is his horse, whose bridle he holds with his right. The other figure is just the same, so there can be no doubt as to its being intended for Castor's twin brother Pollux. The figure underneath CERNVNNOS is bearded, and provided with stags' ears and stags' horns, from the latter of which rings are suspended. The figure suggests that the *cern* of this name is to be interpreted by means of the Welsh word *corn*, 'a horn,' and the Galatian *κάρνον* for 'trumpet,' literally 'a horn' The relation between the vowels in these words is hard to explain: in fact Welsh has, besides *corn*, 'a horn,' *carn*, 'a hoof,' also a horny substance, and *cern*, 'the back part and outline of the cheek,' the front and fleshy part being called *boch* from the Latin *bucca*, 'mouth.' On the whole *Cernunnos* is probably to be interpreted as the Horned One as to the horned god of the Celts, see my *Celtic Heathendom*, p. 78 and *passim*, also my *Celtic Folklore*, pp. 552, 553. *Smertullos* is harder to explain: in point of form it looks like the short and fond form of some such a compound as *Smerto-rīx*, *Smerto-māros*, or *Smerto-litanos*. *Smerto-* seems to be derived from *smer-* of the same origin as Mod. Irish *smior*, genitive *smeara*, defined by Dinneen as 'marrow, pith, strength, pluck; the best part of anything', in Welsh the word, having lost the *s*, is *mêr*, of much the same meaning as in Irish so *smerto* may have meant 'possessed of marrow, pith, and strength.' Thus it would seem that *Smertorīx* may be interpreted as 'strong king, or king of the strong,' *Smerto-māra* as 'greatly strong, or strong and great,' *Smerto-litanos* as 'strong and broad, or strong and exercising power far and wide.' Similarly the name of the goddess *Ro-smerta*, the paredra of a Celtic Mercury, may have meant 'her of pre-eminent power.'

xxx. Paris, Hôtel de Cluny, Altar 4.—

This was an altar of the same description, having on each of its faces an inscription over the figure of the divinity intended; but the traces of the lettering are very precarious. One has been read FORT, that is probably *Fortuna*, standing above two goddesses, so there were possibly two names. The back face has a name ending in VS standing over the figures of Mars and a female divinity, so here

also there may have been two names. Judging from the other three altars, some of the names on this also were probably Gaulish.

xxxi. PARIS (5). In an obscure place in the Museum of the Hôtel de Cluny is another Celtic inscription found in 1836 near Néris-les-Bains (Allier) see Stokes, No. 23, and *C. I L.*, XIII 1388. I examined it several times, and the last time with a candle in my hand my reading, which differs from both Dr. Stokes's and the one in the *Corpus*, is to the following effect:—

BRATRONOS
NANTONICN
EPAÐATEXTO
RIGI · LEVCVLLO
SVIOREBE · LOGI
TOE

The NT in line 2 form the usual ligature the AÐ in line 3 are not very clear; the G in line 4 shows a trace of the straight lines characteristic of a square C the perpendiculars of the LL stand on one continuous base, and the O is a smallish one in the bosom of the second L. We now come to the last word, which presents several difficulties: Dr Stokes, on the basis of M. Mowat's description, reads it LOCITOK; but, setting out from the same, I was rash enough to suggest LOCITOV (*Celtae and Galli*, p. 108). On seeing the stone itself I had no hesitation whatever that the last letter is an E. That is, I read E instead of the I of M. Mowat's reading cited by Dr. Stokes in the *Revue Celtique*, v. 119, 120. This E has the abnormal feature that its middle bar is prolonged unduly and made altogether more conspicuous than the two other bars of that letter. This is illustrated by the reading in the *Corpus*, which is LOCITOIF, a puzzle not to be wholly disposed of, except on the supposition that the last I had been intended in the editor's notes to be deleted. My difficulties are not there but earlier they begin with the GI of RIGI, for those look as if they made either a G without I, or a C with a short I, but GI must, I suppose, be the lettering intended, unless the dative *rigi* was sometimes shortened in pronunciation to *rig*, just as we have Ταρανοου for Ταρανοουι in No. vii. In LOGI, the G has a horizontal tag joining it to the following I, and the reading GI is pretty certain. But as to the next letter, the first of the TOE, I have to take it a good deal on trust, for I am not quite convinced there is more of its top left than would legitimately go to complete an I. However, LOGITOE is far more probable than LOGIIOE.

Completing the second line, which is abbreviated, into *Nantonicnos*,

meaning 'son of Nantonos or Nanto,' and taking the reading to which the preference has been given, the whole would run thus: 'Bratronos Nantonicnos Epađatextorigi Leucullo suiorebe logitoe', that is to say, 'Bratronos, son of Nantonos, made this grave (or lying-place) for Epađatextorix and Leucullos, and for his (or their) two sisters' A word now as to the individual words Bratronos seems derived from *brater*, which must have been the Celtic word for 'brother.' *Nantonicnos* comes in the last resort from the personal name *Nantos*, which occurs as *Nantus* in *C. I L.*, XIII. 805; we have also *Nantorix*, 5485, and other related forms. The long name seems to analyse itself into *Epađ-* for *Epasso-*, meaning, possibly, a horseman, from *epo-s*, 'a horse,' and *Atechto-rix*, which seems to mean a king of *Atechti*. The latter in the singular, *Atechtos*, is probably to be analysed into *ad-techto-s*, like the *Con-texto-s* of the Autun inscription in No v; both names probably mean 'protector.' In that case our *Epađatexto-rix* would mean 'him who is captain of protecting horsemen.' M. Jullian suggests interpreting it as 'a knight of the *Ala Atechto-rigiana*,' as to which see Holder, s. v. Atectorix. *Leucullo* is the dative of *Leucullo-s*, either cognate with or borrowed from the Latin *Lŭcullus*. In the passage to which I have already referred, I ventured to interpret *suiorebe* as a dual standing for an earlier *suihorebe* = *susorebe*, meaning 'to or for two sisters.' Whose sisters they were, the inscription does not make clear they may have been the sisters of the two men with their names in the dative, or of *Leucullos* alone, or else of *Bratronos*, in which case the two men may have been their husbands, and brothers-in-law to Bratronos. *Logitoe* I should take to be a variant of the *logitu* suggested by the analogy of *ieuru* and *carnitu*, with *oe* representing *-auit* or *-ouit* as in Latin *amavit*, as does also probably the *u* of *ieuru* and *carnitu*, as suggested in the notes on Nos. ii and xxxiv. The syllable *it* in *carnitu* has been touched upon at p. 303, and accordingly the form *logitoe* analyses itself into *log-it-oe*. Further, one may say that, just as *carnitu* = *carn-it-u* derives from a nominal base *carna*, 'a heap,' so *logitoe* comes from *loga*, 'a grave, a burial or lying-place,' the accusative of which, *loga-n*, occurs in No. xxxvi, which see It is a peculiarity of this nominal verb that it governs the dative case, wherefore I have ventured the translation, 'made a grave for.' The element *it* in these verbs has already been compared with the same in Latin verbs like *habito*, *vocito*, and its force in Gaulish may not have been frequentative so much as durative or progressive, referring to an activity which occupied some time. The question, however, suggests itself, What was there in these instances to call for verbs with that connotation? and it may be

answered in part by asking another. Why do Greek inscriptions not infrequently have, not ἐποίησεν, but the imperfect ἐποίει corresponding to the *fecit* of Roman ones? I am assured it is the case[1], but there may be a closer connexion between the Gaulish use of verbs with *it* and the Greek use of the imperfect: the latter may have suggested the former, that is, the Gaulish *-it-* may have been intended as a sort of equivalent for the Greek imperfect. At all events, this will serve as an excuse for my giving here a Bourges inscription, which I have not yet seen, but the *Corpus*, XIII. 1326, gives the reading on the stele in three parts, as below: see also *Rev. Celtique*, xv. 237.

xxxi[a]. //////OS VIRILIOS
////XTOC OYIPIΛΛΙΟ

ANЄOYNOC
ЄΠOЄI

ELVONTIV
IEVRV · ANEVNO
OCLICNO . LVGVRI
ANEVNICNO

First comes the name and patronymic of the man commemorated in Latin and in Greek letters, that is, Oxtos (?) son of Virilos: the first part of the first name is gone. Then come two lines in Greek, which mean that Anevnos made it. Then lower down comes a continuation of four lines, in Gaulish this time, and in Latin letters, conveying the following sense—'Elụontiu made this for Aneụnos son of Oclos and for Luguris son of Aneunos.'

This trilingual inscription shows that the son of Virilos had a stone set up to his memory by Aneunos, or very possibly Aneunos procured the plot of burial-ground for the son of Virilos, and had his name placed on the stone to show his right to it. At a later date, however, a friend or relative of Aneunos, named Elvontiu or Elụontio, made the stone commemorative also of Aneunos himself, and of a son of Aneunos, named Luguris. Most likely all the men named belonged to one and the same family, and represented two or three generations, perhaps four. The names are all obscure, but the patronymic Ụirilios or Ουιριλλιο—why not Ουιριλλιος?—may point to the father's name not as Ụirilos or Ουιριλλος, but as the Latin cognomen *Virillio* borrowed. Among the points to be noticed in this remarkable inscription is the fact that the name of the man to whom the stone was originally put up is given twice, in Roman letters and in Greek, which is singular among our Celtic inscriptions. Another thing also to notice is that

[1] I have before me some statistics kindly given me by Mr. Tod of Oriel College, Oxford, together with a reference to an interesting passage in point in M. S. Reinach's *Épigraphie Grecque*, p. 436.

this name is put in the nominative case standing in no immediate syntactical relation with what was added to it and cut at the same time with it This is by no means peculiar, and we have important parallels in Nos xxxiv and xxxv, both found in North Italy. Lastly, the second piece of the inscription ends with the Greek imperfect ЄΠΟЄΙ, for the more usual spelling ἐποίει, 'was making.' It is not certain whether any special significance attaches to the fact that the later portion of the inscription is entirely in Gaulish.

XXXII. CHÂTEAU DE SAINT-GERMAIN (1) A vase of Gallo-Roman ware, found at Sérancourt near Bourges in 1849, is now in the National Museum at the Château, and reads as follows round the neck of the vessel see Stokes, No. 25 —

BVSCILLA SOSIO LEGASIT IN ALIXIE MAGALV

That is to say, 'Buscilla placed this in Alisia for Magalos.' The verb *legasit* is an aorist from the root *leg* of the same origin as English *lie* and *lay*; here it has the causative meaning of 'laid' or 'caused to lie.' It has the vowel *e* in the stem, whereas *logan*, 'a lying-place or grave,' in the Gaulish inscription No. xxxvi, has the vowel *o* like the kindred Greek word λόχος, 'a bed,' as contrasted with λέχεται (explained as κοιμᾶται). With regard to the place-name, the *x* stands either for the sound of *cs* or *ss*, and as to *Magalu*, that was probably a word of only two syllables, *Maglu*, the dative of *Maglos*, which in Welsh became *Mael*, and in Irish (as a common noun) *mál*, 'a prince.' The word *sosio* would seem to be the neuter demonstrative for 'this,' and as it occurs also in the Celtican inscriptions of Rom, it suggests, as pointed out in *Celtae and Galli*, p. 118, that the language here is not Gaulish but Celtican. The Gaulish demonstrative which we have had was *sosin*, which was also neuter it is possible that Gaulish had likewise a neuter *sosio*, but it is more probable that it was the Celtican form alone, and that this inscription is in Celtican. Such a view is corroborated by the fact that we have had the same place-name in the ablative case in No. ii (pp. 276-9), and it was ALISIIA, that is *Alisi̯a*, whereas it is here *Alixie* with a different termination, as to which compare *Celtae*, p. 118. There is also the difference between the prepositions, the reading in the former inscription being probably 'indu Alisi̯a,' not 'in Alisi̯a.' The accentuation would also be different, the stress being placed probably on an earlier syllable in Celtican, that is, either *Álixie* or else *Alíxie*. If as seems probable it was intended to be in metre, it was scanned somewhat as follows:—

Búscilla | sosio | légas|it in | Álixi̯e | Mág'lu.

xxxiii. CHÂTEAU DE SAINT-GERMAIN (2). Some years ago a stone statue of Mercury was discovered at Lezoux in the Puy-de-Dome, and was acquired in 1901 for the National Museum, it now stands in the court at the Château. It seems to be No. 1514 in the thirteenth volume of the *Corpus*, where it is wrongly described as *statua ahenea*, and the only legend there given is the one on the god's chest as in the margin. These letters are closely packed together within a moulding with *queues d'aronde*. So the two final O's are small, and the first one has the I standing on it and not by its side as represented in the *Corpus*. This is, however, not all, for the god has on his back and shoulders a Gaulish inscription which the discoverer, M. Plicque, attempted to read, but without great success: see Déchelette's 'Vases céramiques ornés de la Gaule romaine,' pp. 144–6, where M. Plicque's reading is given—I have not seen his own work on the god Lug. Having examined the shoulders with a candle very carefully, I am able to improve a little on his reading, as I find beyond doubt that the second word is *ieuru*, but my reading also is incomplete. the whole should be scrutinized again, and an excellent cast which M. Reinach has had prepared will prove of great help. The following is what I made of it.—

MERCVRIO
ETAVGVSTO
SACRVM

APRONIOS
IEVRV · SOSI///
ESV///

The S at the end of the first line is very faint and so, even more so, is the I at the end of the second line. That letter was probably followed by another letter which I have failed to trace at all, though one naturally thinks of *sosin* or some demonstrative approximating that form. The next line ends seemingly with V (possibly with O), but I thought I detected traces of an N or M after the V. Lastly, the statue seems to have been standing erect when this inscription was cut, for the first line slopes downwards as if the workman had a difficulty in reaching the last letters of the name APRONIOS. With great diffidence I guess the original to have read *Apronios ieuru sosin Esun*; that is, 'Apronios made this *Esus*.' In that case this monument identifies Esus, not with Mars, but with Mercury, of which evidence is also supplied by one of the ancient comments on Lucan, i. 444–6, cited by Holder (s.v. *Esus*) to the following effect: 'Hesum Mercurium credunt, siquidem a mercatoribus colitur,' &c. There is no reason to suppose *Apronius* a name of Celtic origin, but it is here so far naturalized in the Gaulish language that it assumes the form

THE LEZOUX MERCURY RESTORED
COPY OF A PHOTOGRAPH SENT BY M. SALOMON REINACH
MEMBER OF THE ACADÉMIE

To face p. 328

Apronios at a time when it would probably be more commonly *Apronius* in Latin itself. The evidence that the god was meant to be a Mercury does not wholly depend on the Latin inscription his whole get-up favours this view, though most of his accessories have been damaged. The god holds in his right the inevitable money-bag, but the other hand is broken off, now partially restored. Lastly M. Plicque detected on one of the folds of the god's dress traces of a third inscription, which he read APRO TASGI.... My attention was directed to this too late to do it justice.

Altogether this is one of the most grotesque and clumsy gods I have ever seen; and a workman who observed me looking at the statue as restored volunteered the remark, 'They are all like that'. of course he meant the Auvergnats.

xxxiii[a]. For the sake of comparison it is necessary to mention certain inscriptions which I have not been able to see. One of these is the Nevers inscription which cannot be found. The reading according to Stokes, No. 20, and the *Corpus*, XIII. 2821, was as follows in the margin:—

ANDE
CAMV
LOSTOVTI
SSICNOS
IEVRV

That is to say *Andecamulos Toutissicnos ieuru*, which means 'Andecamulos son of Toutissos made (it).'

xxxiii[b]. The Bavai inscription is on a vessel which is described as a patella, and Stokes, No. 22, gives the legend as VRITVES / CINGOS, but in the *Corpus*, XIII. 10010. 2097, the second line is read CIИCOS, which, however, must have meant CINGOS. A more serious question here arises as to the division of the words: Dr. Stokes treats the whole as *Uritu* or *Vritu Escingos* = 'Excingos made (this).' Hirschfeld on the other hand compares potters' names *Vrittius* and *Vritves*, which he regards as suggesting a compound. So on the whole a Gaulish preterite *writu* cannot be regarded as established and ready to be placed by the side of *ieuru*, *carnitu*, and *logitoe*. As to the whereabouts of this vessel the editor of the *Corpus* states that it was at Bavai, and adds: 'Ibi fuit apud de Fourmestraulx, iam in castro Gussignies apud de Moras'; but I have not succeeded in eliciting from the Château any reply to my letters of inquiry.

xxxiii[c]. Dr. Stokes's No. 27 is a gold ring, outwardly octagonal, said to have been found in the neighbourhood of Thiaucourt (Meurthe-et-Moselle), and to be 'in the collection of the Académie des Inscriptions

et Belles-Lettres.' But I have not been able to trace it, and it appears from the *Comptes Rendus* of the Académie that it was presented to that body on behalf of the late M. L. Maxe-Werly; but this, as has been pointed out to me by more than one member of the Académie, only meant presented in the sense probably of being submitted to that body, which was done by M. P. Charles Robert, who began his account of the ring with the words 'Je présente à l'Académie, de la part de M. L. Maxe-Werly, une bague d'or,' &c.. see the *Comptes Rendus* for 1885, p. 33. At all events it never belonged to the collection of the Académie in fact I am assured that the Académie has never possessed a collection. It has been suggested to me that at M. Maxe-Werly's death his collection went to the Museum at Bar-le-Duc, that the ring is probably included, and that it will be found when the things come some day to be unpacked.

ADIA
NTVN
NENI
EXVE
RTIN
INAP
PISET
V

The inscription reads continuously and Stokes translates it. 'Nappisetu (gave this) to Adiantunnena (daughter) of Exvertinios.' Thus he treats Adiantunneni as the dative of a woman's name *Adiantunnena.* There are two ways of explaining the patronymic · it may simply be the genitive of the father's name, after the analogy of *Doiros Segomari* in iii; his name in that case would be *Exu̯ertinos* or *Exu̯ertini̯os* with *Exu̯ertini* standing as the genitive of either form of the name. Or else one may treat it as an adjective in concord with *Adiantunneni* and standing for a dative feminine *Exu̯ertin*[*i̯*]*i*, nominative *Exu̯ertini̯a*: this would imply that the father's name was *Exu̯ertinos* compare *Tarbeison-ios*, xxvi, and *Ųiri il-ios*, xxxi[a]. Related to the woman's name may be mentioned as cited by Holder, *Adianto*, dative *Adiantoni*, from Bâle in Switzerland, and also a number of names without the first nasal, especially *Adiatunnus*, which is given by *Caesar*, iii. 22, as the name of a chief of the Sontiates or Sotiates, a people of Aquitania. The *Adiantunn-* of the present name seems to equate with the *Adianton-* of the name from Bâle and to derive from a stem *ad-i̯anto-*, which is represented in Welsh by *áđ-i̯ant*, 'a longing, a wish or desire,' just as the *ad-iat-* of *Adi̯atunnus*, is probably represented in Welsh by *áđ-i̯ad*, of much the same meaning as *ađi̯ant*; in fact *ađi̯ant* and *ađi̯ad*[1] are probably derived from the

[1] Why these words have not become *eiđiant* and *eiđiad*, I do not quite see, especially as we have Welsh *aiđ*, 'zeal, fervency, enthusiasm,' whence *eiđig*, 'jealous, a jealous person,' from *ad-i̯es-*, involving the same root *i̯es* as the Greek ζέω, 'I boil,' ζῆλος, 'ardour,' ζεστός, 'boiled, sodden,' Eng. *yeast*, and Welsh *i̯âs* (fem. = *i̯esta*), 'a thrill, whether hot or cold'; but the association with boiling is not forgotten in the language Witness such words as *rhoi ias o ferw*

strong and weak cases of one and the same stem represented by the Gaulish *ad-ịant-* and *ad-ịat-*. Without the prefix we should have *ịant-* and *ịat-*, and the former occurs in the Gaulish *Iantu-māros*, with which Dr. Stokes has equated Irish *étmar*, 'zelotypus' see his *Urk. Spr.*, p. 222, where he refers the Celtic forms to the same origin as Sanskrit *yatná*, 'effort,' and Greek ζητέω, 'I seek.' The derivative syllable *en*, in *Adiantunn-en-a*, better perhaps *Adiantunn-enị-a*, reminds one very much of Goidelic proper names like Adamnan's *Ernen-e* and the Ogmic genitive *Doman-en-i*. Compare also *Dáirene*, the name which 'the Four Masters' (A.D. 619) give to Dáir's offspring. see p. 282 above. The *m* of *Exụertmi* is common in proper names, both Welsh and Irish, and the first part of *Exụert-in-i* seems to warrant its being referred to the same origin as Welsh *eh-orth*, *eorth*, 'assiduous, strenuous, energetic' It is remarkable that both *Adiantunnen-i* and *Exụertin-i* are not of the mere compound kind which Gaulish inscriptions usually illustrate. The next name, *Nappisetu*, baffles me, but it is perhaps a nominative of the *n*-declension, derived in part from what appears as SETV on a silver coin of the Volcae Tectosagi compare *Setonius* and *Setu-bogios*, also the place-name *Setunia*, *Setuna* now *Stonne* in the Department of Ardennes. The other element occurs in the woman's name *Nape*, cited also by Holder, from an inscription found at Tiermes in Soria, Spain, *C. I. L.*, II. 5795. The symmetry of the legend on the ring would seem to suggest that Nappisetu has a *p* too many. Lastly, Nappisetu may be a neuter of the *u*-declension, and not a proper name at all, but a word of some such meaning as that of a gift or present. In that case one would have to construe thus· 'The gift of Exụertinos to Adiantunnenịa' In any case it looks more Celtican than Gaulish.

XXXIV. NOVARA, North Italy. In a cloistered court of the Cathedral of Novara is a Celtic inscription found in the neighbourhood· it is placed in the wall, and surmounted by a label inscribed 'Brionae in territorio vici S. Bernardini dum vetusta ibi silva excidebatur a. 1859.' It is Stokes's No. 2, and No. 10 in the *Dict. archéologique de la Gaule*, where a photograph of it is given. see also *C. I. L.*, V. p. 719, and Pauli's *Inschriften nordetruskischen Alphabets*, pp. 12, 78. The letters are Etruscan, with K, T, P for both those letters and for G, D, B· so the transliterator has to distinguish between them, also to insert nasal consonants when coming before those other

i'r llefrith, 'to give the sweet milk a thrill of boiling,' that is to say, to bring it just to the boiling-point and then stop, the derivative adjective *iesin*, from meaning 'productive of thrills' of delight, has been weakened into 'delightful, beautiful, fair, nice'

consonants, and to supply one other kind of omission. Thus Stokes's reading runs as follows —

Text	Line
K(VI)TESASOIOIKEN	(1)
TANOTALIKNOI	(2)
KVITOS	(3)
LEKATOS	(4)
ANOKOPOKIOS	(5)
SETVPOKIOS	(6)
ESANEKOTI	(7)
ANAREVIXXEOS	(8)
TANOTALOS	(9)
KAPNITVS	(10)

TEKOS TOVTIV

He interprets it as follows *Kvi(n)tes asoioi ken Dannotaliknoi, Kvi(n)tos Legatos, Andoko(m)bogios, Setubogios, Esandekotti, Andare-visseos, Dannotalos karnitus Tekos toutiu* He has added the following translation :—'(This sepulchre) the grandsons (?) of Quinta, to wit the Sons of Dannotalos, (namely) Quintos the legate, Andocombogios, Setubogios, (and the sons) of Exandecottios, (namely) Andarevisseos, Dannotalos, heaped together. Tecos the magistrate (lies here).' I need not mention that I have nothing to say by way of criticizing the Celtic forms of the names suggested by Dr Stokes: they seem to be well established. But the reading especially of the first horizontal line and that of the cross line to the left offer difficulties, which inevitably make the interpretation a matter of considerable uncertainty. A more correct notion of the whole monument may be got by representing it as standing with the cross line as the head line, and the other ten lines as reading downwards in the direction of the length of the stone: that must have been its original position and not lying down as in the wall at Novara.

The letters do not exhaust the points of this monument, for in front of the ten vertical lines, and between them and the top line, there is a row of four closely packed circles with eight *radii* or spokes to each. Are we to regard them as representing chariot wheels or even entire chariots? I cannot answer, but they remind me of the earlier stage when the owners of war chariots were interred in them as in the well-known instances found in the neighbourhood of Market Weighton, Driffield, and other places in Yorkshire. If that is so, it is but natural to regard the four circles or wheels as representing two chariots, and two warriors as the number of men buried. In that case the wheels might be regarded as an instance of early heraldry.

Mommsen in the *Corpus* gave up the first portion of line 1, while

Pauli has tried to begin earlier and has fared worse Dr. Stokes gives K(vi)tesasoioiken, with *vi* in brackets as supplied by him, but as a matter of fact the V is still just traceable, and the same would doubtless have been the case with the I but for a slight breakage which has made that letter impossible to trace I agree further with him in reading *Kvitesasoioik*, for though the last *k* is damaged it is not doubtful. Dr. Stokes has read the next letter as E, but it may be A, though I am on the whole inclined to E. We are agreed also as to the next letter which is N; but it is, I think, followed by an I ending the line. However this is not yet the whole of the line, for there are traces of writing before *Kvites*. The K of this name stands opposite the first A of TANOTALIKNOI, and before it I seemed to trace the equivalents of INA, but I would not be sure of them. What is certain, I think, is the presence there of traces of writing. The whole line is near the right edge and the lettering gets worse towards the top, that is treating the stone as standing upright.

Without going into the question of the origin and descent of the Etruscan alphabet, it will suffice so far as regards this inscription to treat the letters as if they were merely clumsy forms of the Latin ones, with the exception of two or three, such as X which stands for T (with the top as it were fallen half-way down), as D which stands for R (derived probably from P with the Greek value), and as ⋈ which seems to be a sort of double Σ, and to represent probably the sharp sound of *ss*. otherwise there is here no doubling of consonants. The other S in the inscription varies considerably it is like Latin S in lines 4, 5, and 7. In most of the other instances it is more open, except that at the beginning of 6 it is a sort of a wriggle resembling a corkscrew, and that at the end of 3 it is reversed. It is reversed also at the end of 10, where it is rather imperfect and faint.

The difficulties offered by the top line are greater as both of the corners are gone, and especially that opposite the reader's left hand. The reading given by Dr. Stokes is TEKOS TOVTIV. But the first letter X, that is T, stands close to the broken edge, so that one cannot say whether it was not preceded by one or more characters. The next difficulty is the identity of the next letter it looks like our F upside down or our E without the top line, but that line was never there, as no damage can be traced there, and the top end of the perpendicular is complete and of the proper depth. On the whole I am more inclined to treat it as an Etruscan A upside down. The latter I ought to have said looks like an F with its arms drooping a little it fulfils the conditions better than any other character I can think of,

According to this guess the first word reads XFKOS, which seems to be followed by a shallow stop . , after which come the letters XOVXI. The next letter seems to me to be an O rather than a V · then come some cracks covering probably another stop, and rendering the next letter partly imperfect, as to which, however, there is no doubt that it is S. It is followed by a V, after which one detects the two left ends of X. To me the rest of the line is illegible, though Mommsen has suggested several letters more, and a lacuna which he could not fill; for in his transcript he represents this part of the line as '*osnt* . . .', where the letters, except perhaps the *t*, are at variance with the drawing accompanying them. So he fails to help us, except in testifying to the presence of more writing than is suggested by Stokes or Pauli. My own guesses would stand thus. XFKOS · XOVXIO · SVX . . . ., which may be transliterated as follows —$\genfrac{}{}{0pt}{}{\mathrm{T}}{\mathrm{D}}A\genfrac{}{}{0pt}{}{\mathrm{K}}{\mathrm{G}}$OS · $\genfrac{}{}{0pt}{}{\mathrm{T}}{\mathrm{D}}OV\genfrac{}{}{0pt}{}{\mathrm{T}}{\mathrm{D}}$IO · SV$\genfrac{}{}{0pt}{}{\mathrm{T}}{\mathrm{D}}$ . . . . In selecting the alternative equivalents one cannot be wrong in treating the middle word as a nominative *Toutio*, corresponding to which the Gaulish genitive would be *Toutionos*, which, as already mentioned (p. 287 above), Mommsen restored as (Latin) *Toutionis*, equated since by Stokes with the Gothic *thiudans*, 'king.' The first word is more difficult to fix · at any rate two possible treatments of it are possible. (*a*) Either take it to be *tagos*, which recalls the latter part of the name of the Ecenian king *Prasu-tagus*, alongside of which Holder places a genitive *Ito-tagi* (*C. I. L.*, IV 2451), which may, however, be for *Ito-tugi̯-i*: compare *Tagius*, fem. *Tagia*, assumed by Holder on the strength of *C. I. L.*, XIII. 3456. (*b*) Another valuation of the Etruscan characters is quite possible, yielding *Dagos*, as in Gaulish names like *Dago-rix*, 'good or brave king,' *Dago-u̯assus*, 'good or brave youth,' and others, including *Bitu-daga*, cited by Holder. In Welsh the word has been reduced to *da*, 'good,' Med. Irish *dag-*, as in *dag-duine*, 'bonus homo,' dag-ḟer, 'bonus vir' = Welsh *dewr*, 'brave man,' and adjectively 'brave.' If I am right in supposing the last word to begin with SVX, it would probably mean some name, Su-t . . . or Su-d . . . , beginning with the prefix *su*, with which we have already had to do: see p 297 above.

I do not believe a photograph would be of much use, and I have not yet succeeded in getting a squeeze of this remarkable monument; but Signor Tarelo, the most learned archaeologist connected with the museums of Novara, has kindly promised to do his best, in addition, that is to say, to the valuable help which he most readily gave me, both when I was there and before I arrived. The foregoing guesses of mine will be found put together in the arrangement on the next page.

The heading or the important portion of the monument seems to have been the separate line over the four wheels. The names of which it consisted are in the nominative, as was the case with No. xxxi[a], where they stand conspicuous in no syntactical relation to the rest of the inscription. I should take the words to mean — 'Tagos, the public official or magistrate, (and) Sut . . . .' The latter was perhaps somebody of lesser importance, but seemingly the personages were two and no more, which agrees with the conjecture that the wheels represent the two war-chariots of the deceased.

In the first of the vertical lines KVIXES seems to be the Gaulish genitive of the borrowed name KVIXF, that is *Quinta*, just as KVIXOS stands for *Quintos* in the third line. Dr. Stokes has treated *asoioi* as the noun on which the genitive depends, and suggests as the translation 'grandsons of Quinta.' The singular should be *asoios*, which is probably to be analysed into *a-so-io-s*, where the root would be *sō* or *sū*, which has already been noticed in connexion with *atehotisse*, with *hot* for *sot* of the same origin as Irish *suth*, 'birth, offspring,' *Celtae*, p. 113 · the English word *son* and its congeners are of the same origin, and the *soios* portion of our word recalls above all the Greek *υἱός*, 'son' The prefix in *asoios* may have been *ad*, or else the *a* which we have in such Welsh words as *a-dysg*, 'instruction,' and *a-def*, 'to confess'· so the whole word may well have been expressive of relationship, and may have specially meant a grandson, if not that, at any rate a descendant. Dr. Stokes was inclined to treat *asoios* as standing for an earlier *asovios*, which, should it be found phonologically preferable, would fit this interpretation just as well or better. The termination *oi* of the plural is matched by that

of XFNOXFLIKNOI, that is *Dannotalicnoi*, a patronymic meaning 'the sons of *Dannotalos*.' The intervening word I am inclined to read KENI. it admits of being transliterated either *ceni* or *geni*, and it has been taken to mean 'to wit, namely, even.' The fourth line gives us another borrowed Latin word to place by the side of Quintos and Quinta, as it is *legatus* borrowed · it is not certain whether it is used in its Latin sense or simply employed as a personal name. Apparently the descendants of Quinta are here divided into two groups, the sons of Dannotalos and the sons of Exandecottios. Dannotalicnoi as a patronymic meaning the sons of Dannotalos offers no difficulty, but it seems somewhat harsh to suppose that alongside of it we have in ꟼSFNꟼKOXI, that is, *Exandecotti*, simply the genitive of *Exandecottios* (if not that of the simpler form *Exandecottos*, like the *Cottos* from which it is derived) without any noun on which that genitive might be said to depend I should prefer to treat it like *Dannotalicnoi*, as standing for a nominative plural *Exandecottii*, resembling such patronymics in -ιος as Ριουμανιος and *Tarbeisonios*. The objection to this has doubtless been that the other two plurals end in *-oi* not in *-i*; but leaving that for the present, let us proceed to the verb which is KFDNIXVS, that is, *carnitus*, the plural of the form KAPNITOY of the Saignon inscription, as to which see p. 303 above and No. xxxvi below, also *Celtae*, p. 117. If the final *u* of *ieuru*, 'fecit, ἐποίει,' represents what was in Latin *-auit* in forms like *amavit*, then the *-us* of *carnitus* should correspond to the *-auis-* underlying *-auēre*, *-auērunt* in the forms *amavere*, *amaverunt* of the plural in the same verb and the like.[1] The plural nominative to the verb *carnitus* consists of the nouns in the vertical lines. It is more difficult to find an accusative to represent the object of the verb: on the whole I am inclined to think that there is no accusative expressed in the sentence. At any rate the doubtful beginning of the first line, where I have guessed INF, is more likely to be an adverb than the object of the verb, that is a word meaning 'here, below, hard by,' or the like. At the end the uncertain element is *ceni* or *geni*, which, whatever it exactly meant, is not very much like an accusative of any kind. Accordingly my attempt to translate the whole will stand thus, and with it should be compared No. xiv, p. 302 above, and No. xxxvi below —

'TAGOS THE MAGISTRATE (AND) SUT[ONIOS].

Here Quinta's grandsons, to wit the Sons of Dannotalos, (namely)

[1] It is right to say that Brugmann expresses himself as not quite certain as to *-erunt* = *isont(i)* · see his *Grundriss*, II. §§ 841, 1023, 1079.

Quintus the Legate, Andocombogios, Setubogios, (and) the Sons of Exandecottos, (namely) Andarevisseos, Dannotalos, piled up a cairn for them.'

Lastly, a word as to Exandecotti as a plural: there is a prima facie objection to this, arising out of the fact that we have by its side two plurals in *-oi* of the same declension *asoioi* and *Dannotalicnoi.* Of the two endings *oi* and *ī* of the nominative plural, the latter is the one that won the day in Latin and Celtic, while in Greek *oi* held its ground as in *ἀδελφοί, χρόνοι*; and just as in Latin one finds cited only *pilumnoe poploe* (for the usual *populi*), so in Celtic these two instances *asoioi* and *Dannotalicnoi* seem to stand alone. no other certain example appears to be on record. There must, however, have been a period of transition when both *-oi* and *-ī* were in use side by side, and to that period the Briona inscription would seem to belong. I cannot help adding that this pair of instances of the plural in *-oi* marks this inscription as an early one it is possibly the earliest Celtic on record.

XXXV. BRESCIA. There is here a bilingual stone of possible interest to Celtists it was found built into the wall of the belfry of one of the small churches in the neighbourhood of Limone near Lake Garda, and is now inserted into an inside wall of the Brescia Civic Museum of objects of the Roman period. It is conveniently placed for inspection, but the letters have been painted dark red, and here and there mispainted as usually happens in such cases. This forms a great difficulty when one wishes to make use of photographs. The inscription is Dr. Stokes's No. 3· see also *C. I L.*, V. No. 4883, and Pauli, loc. cit., p. 15. The reading is as follows ·—

TETVMVS
SEXTI
DVGIAVA
SA⋈ADIS
:·:OWꟈ↟ꟈCAFI
OBFΛ↟FИF:·: IИF

Dr. Stokes has rendered it continuously as one sentence · 'Tetumus (filius) Sexti, Curator Sassarensis, me addixit Obuldino Tino.' Besides other differences between his interpretation and mine, I treat the first four lines as Latin in spite of the character for *ss*, and as giving the names of the owners of the ground or the tomb Those names are put in the nominative case as in the Briona inscription, and we may treat them as probably those of husband and wife, Tetumus son of Sextus, and Dugiava daughter of Sassadis. Of these names

Dugiava is undoubtedly Celtic, and on looking up the word in Holder's *Altcelt Sprachschatz*, it will be found that most of the instances and kindred names come from the same district and from Piedmont. *Titumus* will come under notice later, and *Sassadis* has a number of seemingly related forms cited by Holder, such as Sassus, Sassa, and Sassius, Sassia[1], but Holder's own account of the name is that in SAꟿADIS the D has to be treated as Etruscan R so as to read Sassaris, but in spite of the occurrence of Saserus and Sasirus, this does not appear obligatory or very easy to accept, seeing that the previous line has in *Dugiava* a D which has practically to be given its ordinary value in the Latin alphabet. At the same time there is no denying that the inscriber was very mixed in his alphabets, perhaps even more so than appears at first sight, but more of this presently.

I come now to what I regard as possibly Celtic, in which some of the symbols require special notice among other things the *t* which should have been X is indicated by five points. In the first instance it serves to mark where the non-Latin portion begins, and in the second one it occurs at the division between two words; but, in the latter position, it is right to say that the five points are placed nearer to the preceding letter than to the one next following, so that even there we are not obliged to treat them as a stop. The spacing helps to mark off the letters *ina* as making perhaps a separate word, with which the first of the vertical lines on the Briona stone, p 336, seems to begin. It is to be noticed that if the five points formed a mere punctuation mark (as in *C. I. L.*, XII. 1416), they should have been placed immediately after Sassadis and not at the beginning of the next line. Next must be mentioned a sort of an arrow-head which appears in both lines, for it is the same symbol in both, though at first sight there seems to be considerable difference between them. That difference, it should be pointed out, is due to the fact that the first ↟ is damaged, and then misrepresented by him who put on the paint. I may add that the damage reaches upwards to the D above, and that

[1] With the forms with *ss* Pliny's supposed *sasia*, 'rye,' with vowel-flanked *s* can hardly have anything to do Holder makes it Ligurian, and the Welsh for barley is *haiđ* for an earlier *heiđ*, which suggests a Gaulish *sasi̯o-n* the Welsh would be successively *sasi̯o-n*, *hehiđo-n*, *heiđ*, *heiđ*, *haiđ*, Breton *heiz*, *hei*, all masculine now. The MSS. of Pliny's *Nat Historia*, xviii. 141 read, however, not *sasia* but *asia* after an *s* (*sub Alpibus asiam*), and this latter or rather *asi̯o-n* would also fit the Celtic words: compare Welsh *haearn*, 'iron,' from *eisarno-n*, *eiharno-n*, *heiarn*, *haearn*. In favour, however, of the emendation of Pliny's word into *sasia*, one could not help pressing the Sanskrit *sasyá*, 'feldfrucht,' Zend *hahya*, 'getreide.'

there our painter has given that letter the look of a very modern D. Dr Stokes reads the arrow symbol in the lines of Etruscan letters as meaning *d*, and Pauli makes it into a *z*. In my opinion it is not a letter but a stop, and whether it should be called an arrow-head or an inverted twig I can hardly say; but for comparison I need only refer to some of the varieties of instances given in De Rossi's first volume, such as Nos. 317, 339, and 661, also 352, 360, 395, 477, 494, 542, 585, 586, 588, 612, compare 689 and especially 722, where the twig has no less than four pairs of little branches the number of them is just double that in the present case, but the shape and direction are the same. This does not sum up the difficulties of these two lines, for the first of them has good Latin CA followed by the Etruscan form of the letter A Lastly, we have probably to suppose the W to mean an M upside down; the N is inverted in both the instances into И, which may be said to mean also that it is more Roman than Etruscan. The L has the form of the Greek Λ, which according to Pauli is its form also in the Este alphabet of Etruscan.

Let us now separate the words, and they will stand thus —

TOME ECAAI
OBAL ANAT INA

On the hypothesis that this is Celtic—and it is only a hypothesis —I string together alternative conjectures, showing how one might essay the interpretation (1) In the first place let us assume that OBAL, which, by the way, might perhaps be transliterated *oval* or *ombal*, meant 'and, also, likewise.' The whole might then be rendered thus 'Tome (daughter) of Ecaaios also waits here.' *Tome* might be regarded as based on the name *Te-tumus* and as borne by a member of the family of Tetumus. Tome's name is followed by her patronymic, in which one seems to detect a form of *Eccaios*, which Holder cites from various Celtic coins, including among them some which are ascribed to the Transpadan Boii. But the two *a*'s offer a difficulty: What is one to make of them? Various conjectures occur to me.— 1. Take the two *a*'s to mean *ā*. to say the least of it, that was hardly to be expected. 2. Suppose that the inscriber made the mistake of cutting an A instead of a Greek Λ, then we should have to correct his spelling into *Eclai*, a name which would derive little confirmation from Holder. *Eccai* would have been more to the point if the inscriber had not been averse to doubling consonants. 3. One might assume that the two *a*'s were not intended to be there, that the inscriber, hesitating between the forms of Latin A and Etruscan A, inadvertently cut both on the stone. He had just cut a Latin

C where a K was to be expected, and he went on cutting a Latin A: then he discovered his mistake and proceeded to make it worse by placing an Etruscan A by its side. At any rate, if one of the two is to be cancelled, it is doubtless the first, as his vowel is otherwise the Etruscan one, which occurs four times in the next line. 4 Lastly, suppose he cut not an A but a Λ, and on discovering his mistake drew a line through the middle of his Λ—a short line, as he did not wish to disfigure his work—the result would look an A, while in reality he regarded it as a deleted Λ. Whether this is what Pauli meant by copying it as an italic *l* with a point underneath, *ḷ*, I do not know. These two last conjectures come practically to the same thing, namely, that the reading intended was *Ecai*, the genitive of *Ecaios*, or as the coins give it *Eccaios*. For the present I pass by the word OBAL, in order to mention that *anat* would make a good Celtic verb of the same conjugation and position in the paradigm as Latin *amat*. *Anaim*, 'I remain, I wait,' is one of the most common verbs in Irish, and *anat* would here have to be taken as proof of the inscription being probably Christian, expressing the idea of waiting for the resurrection or the coming of Christ. compare De Rossi, I. No. 317, 'expectatque Deum superas quo surgat ad auras', Le Blant, *Inscriptions chrétiennes de la Gaule*, No 478 'diem futuri iudicii . . . letus spectit', and Le Blant's *Nouveau Recueil*, No. 17, 'expectantque diem nunc Domini properam.' Lastly, the adverb *ina* has its *in-* probably represented by the *yn* of Welsh *yn-a*, 'there (near you), then (of time),' and *yn-o*, 'there, then.' These words are pronounced *y-na* and *y-no*, which separates them from the preposition *yn*, 'in,' as in *yn-nof*, 'in me,' *yn-nom*, 'in us,' *yn-noch*, 'in you,' in which the *y* is blocked by the consonant and not left open. see p. 277 above.

(ii) As one might search the Celtic languages, probably in vain, for a word like OBAL with such a meaning as that of 'also,' let us try it with that of offspring, say 'son,' 'daughter,' or 'grandchild'. the interpretation would then at first sight be 'Tome, daughter of Eccaios, waits here.' We are, however, not bound to treat *Tome* as nominative, and if we try the genitive we have· 'The (grave) of Toma (she the) daughter of Eccaios waits here.' This improves the syntax from the Celtic point of view, but it leads to another conjecture which claims a mention, namely, that Tomạ, genitive Tome, is not so likely to be a feminine as a Celtic way of treating *Thomas*, genitive (Latin) *Thomae* or *Thome*. In fact, putting this and *Tetumus* together, one may expect the key to the whole puzzle to prove to have been '*Thomas* who is called *Didymus*,' in the New

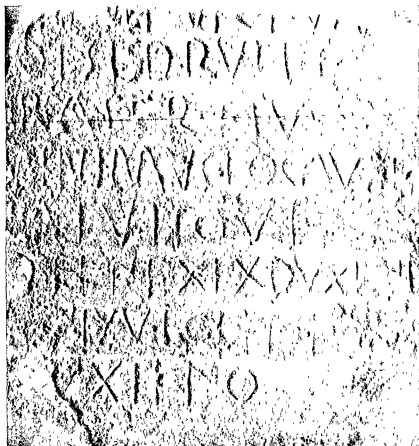
Testament. That is, *Tetumus* was *Didymus*, or Δίδυμος, borrowed with the *d* changed into *t* in the pronunciation, unless, indeed, one should treat the *t* as an Etruscan X to be given here the value of *d*. Of course, in the latter case, it ought to have been written with Latin *d*, but it has been seen already how little one can calculate on the inscriber's sense of consistency. According to this guess the interpretation might be: '(The grave or urn) of Thomas (he the) offspring of Eccaios waits here.' The possibility of admitting the idea of an urn is warranted by the next inscription to be mentioned.

(iii) One would probably have to regard OBAL as a neuter borrowed from another language, but to borrow a word for son or daughter, or even grandchild, would seem less likely than for a particular kind of tomb or urn. The interpretation would be much the same as before, except that here the word for tomb or urn is to be treated as given, namely, as *obal*. In other terms, though the ground or the tomb belonged to Tetumus and Dugiava, the first person actually buried there was Thomas, son of Eccaios, the deceased being a member of their family, possibly a grandson. The fact of the relationship may be regarded as sufficiently indicated by the association of the names *Thomas* and *Didymus*, that is, supposing they went together in the Christian family concerned.

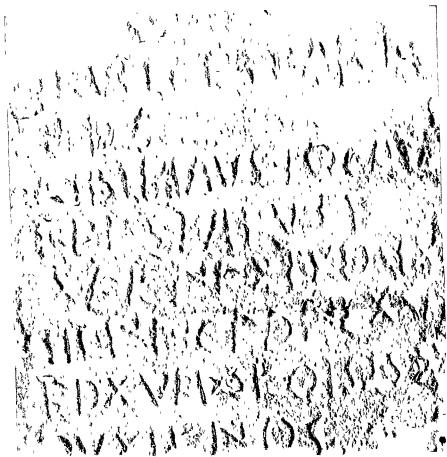
I have sufficiently indicated how I should treat this inscription if I felt sure that the latter portion is Celtic. Having misgivings on that point, and thinking it might possibly be Etruscan, I wrote to Professor Danielsson, of Upsala, the well-known Etruscan scholar, and I asked him to tell me if he thought the two last lines could be claimed as Etruscan. He kindly replied at once, expressing his view that it does not seem to him to be Etruscan. So far as this goes one is encouraged to think the words in question may be treated as Celtic. But Celtic and Etruscan do not exhaust the list of languages spoken formerly in North Italy.

xxxvi. ROME. In the Gregorian Museum of Etruscan antiquities in the Vatican is to be seen a bilingual inscription, brought thither from Todi, in Umbria. The stone, with nearly the same double inscription on its two sides, forms No. 1 in Dr. Stokes's *Celtic Declension*; *C. I. L.*, I. p. 262, No. 1408, and Pauli's No. 26, pp. 23, 84. A good deal of the top of the stone is gone, with the whole of what probably constituted the first line on the side which I call *A*, and the whole of the first two lines on side *B*: there are other lacunae, but those to which I have alluded are both in the Latin. The whole may be given provisionally thus —

A		*B*
[ATEGNATO	(1)	[ATEGNATO
DRVT]EI · VRNVM	(2)	DRVTEI · F. VRNAM
[C]OISIS DRVTI · F	(3)	COI]SIS
RATER · EIVS	(4)	DRVTEI · F. FRATER
MINIMVS·LOCAV E///	(5)	EIVS
STATVITQVI	(6)	MINIMVS · LOCAV
[FX]ΕKNFXI · XDYXIKNI	(7)	IT · ET · STATVIT
[KFD]NIXV·LOKFN·KO[ISIS]	(8)	FXΕICNFXI · XDVX
[XD]VXIKNOS	(9)	IICNI · ICFDNIXV
	(10)	FDXVFMKOISIS · X
	(11)	DVXIKNOS

The first question which all this suggests is, why one should have practically the same thing four times over on the same stone; but that may be left to be answered, so far perhaps as it can be answered, by the details on which one must now enter Version *A* of the Latin begins with what seems to be the lower half of EI ending DRVTEI, which occurs in full in line 4 of version *B* · the point after DRVT]EI in version *A* is a guess of mine. Following this, in line 2, we have the lower portions of letters which have been read VRDVM, and guessed to have signified *sepulcrum*, if indeed that very word was not the one intended. But it needs very little attention to see that the D is impossible, and my first guess was that the letter was R, helping to make another unknown vocable VRRVM , but on scanning closely an excellent squeeze made for me by Dr. Nogara, the head of the Museum, who assisted me in every way, I see clearly that the letter was N, with its first limb longer than the second, as regularly occurs in the Etruscan lettering. This being so, it becomes clear that the correct reading is *urnum*, a faulty rendering of the Latin accusative *urnam*, governed by the verbs in lines 5 and 6 · on the other side they are 'locavit et statuit.' *Ategnato Drutei*, if that is to be the restored commencement of the inscription, stands, as we learn from the Celtic version, for *Ategnato Drutei filio*, and it may probably be regarded as an imitation of Gaulish, as in *Doiros Segomari*—'D. (son) of Segomaros' on the Dijon saucepan · see No. III above, and others. The edge where the first letter of Coisis or Goisis should stand is gone, but not so in the case of the F of FRATER : very close to the first R of RATER there have apparently been attempts to scratch an F ; but I do not feel at all sure that it was there originally, the F at the end of line 3 being intended as the beginning of FRATER, leaving *filius* unrepresented even by F, just as with *filio* after *Drutei* in line 2. However, worse was to come, for, when the inscriber reached

PHOTOGRAPH OF DR NOGARA'S SQUEEZE OF THE TODI BILINGUAL IN THE GREGORIAN MUSEUM OF ETRUSCAN ANTIQUITIES IN THE VATICAN

Side *A*

Between pp 342, 343

THE SAME STONE

Side *B*

LOCAV, he cut after the V a letter which he seems to have erased, thereby producing a hollow where it is impossible to read anything. Then follows an E, the bottom of which is partly gone owing to the edge having been damaged. Whether that E was followed by a T to make ET one cannot tell, or whether, in case the T was there, the inscriber regarded it with the E as making the conjunction it is impossible to say, for his nearest approach to *locavit* may have been *locavet*. In any case he did not leave room for the IT required to complete LOCAV into LOCAVIT before he cut the E, which is now the last letter to be read in the line as it stands. The next line begins with faint ST, and the whole of it reads STATVITQVI, with a decided I at the end, where one ought to have had E as part of *-que*, 'and.' After these departures from ordinary Latin one is not surprised to find that the author of the *A* version gives us in Latin the two spellings of the genitive *Drutei* and *Druti*. the variation is, however, of importance as suggesting that *Drutei* was probably an archaism; it will therefore not materially help to prove that the inscription was a very early one. One may now enumerate the eccentricities of the Latin in version *A* as follows —1. *Drutei* for *Drutei f* 2. *Urnum* for *urnam.* 3 The inconsistency of writing *Druti* for what had been written *Drutei* in the previous line. 4. A blunder either in the spelling of *locavit* or in the use of *et* when a *-que* was to follow. 5. The spelling of the latter vocable as *-qui* instead of *-que.*

These peculiarities of version *A* seem to supply a reason why it was thought necessary to have the same legend put into more correct Latin. As a matter of fact no solecisms of the kind noticed are to be found in what is left of version *B*, which may be assumed provisionally to have read when it was perfect ATEGNATO | DRVTEI · F VRNAM | COISIS | DRVTEI · F. FRATER | EIVS | MINIMVS · LOCAV|IT · ET · STATVIT. The letters intact begin with the SIS of Coisis. The top corner of the D of the next line is gone, and similarly a portion of the top of the R at the end of that line is damaged. But as to the lettering generally it is very different from that of version *A* where the letters are of the ordinary shallow kind. Here they are cut comparatively deep into the stone, and the sides of the cutting are perpendicular, so that in the squeeze the paper becomes more or less detached at the edges of such letters, and the letters themselves are incompletely jointed. Thus a V is represented by V, and even O tends to be O. Moreover the K in lines 8 and 9 is not quite such but IC, consisting as it were of I and C placed very closely together, but not actually joined. But here, as in the other version, some of the T's tend to be very like Γ, and the whole

appearance of the letters is more thick and stumpy than in version *A*. Everything goes to show that the inscriptions on the two sides were carved by different hands.

Before proceeding further it is convenient to discuss very briefly the proper names found on this stone first comes Ategnātos, of which Holder gives other instances, together with the feminine Ategnāta. The name begins with the prefix *ate*, followed by *gnātos*, which Dr. Stokes equates with the latter part of the Greek *κασίγνητος*, *Διόγνητος*, and the like compounds, and with the *gnātus* of the Latin *agnatus* and *cognatus*. *Druticnos* practically means 'son of Drutos,' literally, 'little Drutos,' and the latter, if it was pronounced Drūtos, as is probable, equates with the Welsh word *drud*, in Med. Welsh *drut*, 'a hardy man, a hero.' Stokes and Holder cite also the feminine *Druta*, as to which see p. 274 above, and as to the formative *-icno-* compare pp. 278, 283, 336 above. The name of the youngest Druticnos only occurs complete in the Etruscan letters as KOISIS, which Dr. Stokes has transcribed Coisis Holder corroborates him by citing a single doubtful genitive *Coesi* from the Berlin *Corpus*, V. No. 5621, but I am inclined to transcribe our instance as *Goisis*, and to equate *goisi* with the gōi of *Góidel*, *Gáedel*, *Gaoidheal*, 'a Gael,' Welsh *Gwyđel*, 'an Irishman.' But the meaning of *goisi-* is obscure, unless we may assume that we have here to do with a form from the same origin as Gaulish *gaiso-n*, *gaiso-s*, 'Vergil's *gaesum*, a spear,' Irish *gáe*, 'spear,' *gáide*, 'armed with the spear, *pilatus*,' a regularly reduced form of *Gāisid-i̯o-s* or *Gōisid-i̯o-s*· as regards the diphthongs *āi* and *ōi* compare the Irish equivalents of Doiros, p. 282 above. With a different affix we should have *Gāisid-elo-s* or *Gōisid-elo-s*· compare the names which Holder cites under *-ĕlo-*, feminine *-ĕla*, such as Antelus, Bittelus, Cemenelum and others. He remarks that M. d'Arbois de Jubainville considers the termination to have been also Ligurian. The meaning of *Góidel* or *Gáidel* would probably be parallel to that of *gáide*—'one who is armed with the spear, a spearman, a *gaesatus*.'

Let us now take the Celtic portions of the inscription in detail, beginning with version *A*, which, unlike the Latin above it, does not appear to contain blunders: the author of the inscription knew Celtic, but he was shaky in his Latin. In the first place let me remark that the first two or three letters of the three lines are gone at the left edge, also the ISIS of Koisis of line 8; while the second KN of line 7 are barely legible. There is, however, no doubt that the original reading was the one which has been suggested this is established by the other Celtic version in which every letter is certain,

though the bottom of all the letters of line 11 at the end is gone owing to breakage. The two inscriptions placed side by side in Roman letters stand provisionally as follows —

Ategnati · Druticni |	Ategnati Drut|icni·
carnitu · logan · Goisis |	carnitu | artu̯ass Goisis·
Druticnos	D|ruticnos

The two versions differ only in the accusative, one having *logan*, a feminine singular, and the other *artu̯ass*, which probably is a feminine plural derived from an earlier *artu̯ans* I take *logan* and *artu̯ass* to be alternatives, neither of them being necessarily a blunder. As to the former see Dr. Stokes's comparisons in his *Celtic Declension*, p. 53, where he cites the *lo* occurring in two Ogam inscriptions in South Wales. We have *lo*, also for *log*-, in the Med Welsh *golo*, 'bury, burial, interment,' for an early *u̯o-log*-, and *gwely*, 'a bed' (for early *u̯o-log-i̯on*), plural *gwlâu* (for *gwlag-eu*=*u̯o-lag*-) with change of vowel as in *troed*, 'foot,' plural *traed*, while Irish has *laige*, 'concubitus,' also *luighi*, pointing to the same double stem *logi̯o*, *lagi̯o* The other accusative *artu̯ass*, meaning perhaps stone chambers, seems related to the Irish word *art*, 'a stone, a gravestone' see Stokes, loc cit., and Holder, s.v. artos. The two versions have been rendered by Dr. Stokes respectively as follows:—

'Ategnati Druti filii tumulum congessit Coisis Druti filius'

'Ategnati Druti filii lapides sepulchrales congessit Coisis Druti filius.'

Here it will be seen that Dr Stokes has not ventured to follow the original order which would have given us 'Ategnati Druti filii congessit tumulum Coisis Druti filius,' and, for my own part, my habit of Celtic syntax makes my difficulty as to the sequence of the words in the original very considerable. In fact I cannot readily believe that the accusative *logan* was meant to be separated from the genitives dependent on it by the verb *carnitu*, and I am forced to think that a construction which would require one to take that view cannot be the right one. The two last inscriptions, both found in Italy, seem to point the way to construe this: they begin with nominatives standing alone without verbs. Here also a noun comes at the head and stands alone, but in the genitive case, which makes this instance more closely articulate than the others· it reminds one of the almost exclusive use of the genitive in the Ogam inscriptions of these Islands. In other words I would construe thus —

Ategnati Druti filii (locus).
Congessit tumulum Goisis Druti filius.

The other version with *artuass* would, of course, run parallel, and whatever may be said of the Latin, 'Congessit tumulum Goisis Druti filius,' the sequence of the words in 'Carnitu logan Goisis Druticnos' is idiomatically Celtic, with the verb at the head of its sentence, at the same time that it evidences a preference for less complicate syntax than Latin, as might naturally be expected in the case of a people like those of Gaul, who were much less given to writing than the Romans were. The two versions are possibly in metre, and the division which has just been suggested derives confirmation from the probable division of the legend as follows, with the same word ending both parts take version *A*.—

Ategnati Druticni.
Carnitu logan Goisis Druticni.

Finally there remains one or two comparisons to make between the Celtic and Latin versions. among other things the fact that the Celtic commences with the genitive *Ategnati*, not with the dative *Ategnato* hitherto accepted for the Latin, renders it probable that the Latin began so likewise, and that version *B* ran thus —'Ategnati Drutei f. urnam Goisis Drutei f. frater eius minimus locavit et statuit.' Next, there is the question, what the words 'locavit et statuit' precisely meant: did *locavit* refer to providing the *locus*, the plot of burial ground, or else to the *loculus*, the special compartment or shelf in the tomb, which was to receive the urn? I am inclined to the former view, and it is for that reason I have proposed the equivalent of the Latin *locus* as the noun on which the genitive *Ategnati Druticni* is to be understood to depend at the beginning of the Celtic versions. In other terms, the Latin gives one to understand that Goisis both purchased or otherwise provided the plot of ground and set up his brother's urn in the tomb erected there. The Celtic, on the other hand, seems merely to say that the ground was appropriated for Ategnatos, and that Goisis built up some kind of an erection there. The two statements are consistent, but the Latin seems to make no direct reference to the erection made there, and the Celtic no reference to the urn mentioned in the Latin.

To return to the question put at the outset, it is hardly necessary now to suggest that the spectator did not read the same thing four times. doubtless the trial side *A* was wholly concealed by the stone being inserted in a wall. This carries with it the probability, that the verb *carn-it-* meant not the mere heaping together of stones or timber but orderly work, the construction of a regular building.

Now that the more important Celtic inscriptions have been rapidly reviewed, it may be found convenient to have the declensional forms which they supply tabulated as follows, without attempting for the present to distinguish between Gaulish and Celtican :—

O-DECLENSION

SINGULAR :—

(α) *Nom Masc.* Andecamulos, xxxiii[a].
Ανεουννος, xxxi[a].
Βινναμος, xvi.
Bratronos, xxxi.
Καρταρος, xvii
Κασσιταλος, xviii.
Κατουαλος, xxiv[a]
Cernunnos, xxix
Cingos, xxxiii[b]
Contextos, v
Crispos, i.
Dannotalos, xxxiv
Donnos, iii.
Εκιννος, xxiv.
Iccavos, iv
Legatos, xxxiv
Licnos, v.
Quintos, xxxiv.
Σεγομαρος, vi
Smertullos, xxix
Tagos, xxxiv
Tarvos, xxviii.
Ουηβρουμαρος, vii.

Gen. Masc. Ategnati, xxxvi.
Dannotali, ii.
Segomari, iii
Exuertini (?), xxxiii[c].
Dative Alisanu, iii
Ανεουνο, xxxi[a].
Duorico, xxv
Leucullo, xxxi.
Magalu, xxxi.
Seboddu (?), i.
Abl Dugiiontiio, ii.

Acc Neuter. canecosedlon, v
cantalon, iv
νεμητον, vi
.. ramedon (? mas), i

PLURAL :—
Nom. Masc. Senani, xxvii
Usciloni, xxvii

(β) SINGULAR :—
Nom Masc. in -io-s.
Andocombogios, xxxiv.
Apronios, xxxiii.
Εκιννιος (?), xxiv
Ηλουσκονιος, xv
Ριουμανιος, xxiv.
Setubogios, xxxiv.
Tarbeisonios, xxvi
Uirilios = Ουιριλλιο, xxxi[a]

Nom Masc Voretovirius (Latinized), xii
Gen Masc Ecaai, xxxv.
Acc Masc in io-n.
Brivatiom, xxvi (for Brivation).

PLURAL .—
Nom. Masc asoioi, xxxiv.
Exandecotti (?), xxxiv

(γ) SINGULAR :—
Nom. Masc in -eo-s.
Andarevisseos, xxxiv
Κονδιλλεος, xx
Λιτουμαρεος, xvi.

Ουιλλονεος, vi
Dat Ουερετεου (?), x.

(δ) SINGULAR :—
Nom. Masc. in -icno-s.
Αδρεσσικνος, xxii.
Druticnos, xxxvi.
Oppianicnos, iv
Ουερσικνος, xviii.
Τοουτισσικνος, xxxiii[a].

Gen Masc. Druticni, xxxvi.
Dat. Masc Aneunicno, xxxi[a].
Oclicno, xxxi[a].

Acc Neuter in -icno-n.
celicnon, ii

PLURAL :—
Nom. Masc. Dannotalicnoi, xxxiv.

(ε) SINGULAR .—
Nom. Masc. in -aco-s
Ιλλανουιακος, xvii
Ιλλιακος, xiii
Ουριττακος, xv

Dat. Masc. Anualonnacu, v.

I-DECLENSION

SINGULAR —

Nom Goisis *or* Coisis, xxxvi	*Acc* ratin, xxvi	*Dat* Διουι, xvi[a]
Iovis, xxviii	Ucuetin (?), ii	Λαμι, xviii
Martialis, ii.		Lugiii, xxxi[a]
Ναμαυσατις, vi.		Sumeli, xii

U-DECLENSION

Nom Esus, xxviii.	*Dat* Ειvουι, xviii
Λιρνιτους, xi	Γρασελουι (?), xiii
τοουτιους, vi	Μαρεσουι, x
trigaianus, xxviii	Ταρανοου, vii.
Uolcanus, xxviii	. ο)υι, xxii.
Acc. Esun, xxxiii	*Abl* βρατου((?) -δε), vii, xiii, xvii, xviii, xxii, xxiv, xxiv[b]

A- AND E-DECLENSION[1]

SINGULAR FEM. —	*Sing. Masc in* -as
Nom Buscilla, xxxii.	*Gen* Tome (?), xxxv
Κρειτε, xxiii	*Sing Fem in* -ia
Gen Quintes, xxxiv.	*Dat.* Adiantunneni, xxxiii[c]
Acc logan, xxxvi	Αιουνιαι, viii
ματικαν, xiv	Βλανδοουικουνιαι, ix
Ucuetin, ii.	*Abl.* (α) Alisia, ii.
Dat. (α) Adiantunneni (?), xxiii[c]	(β) Alixie, xxxii
Βηλησαμι, vi	PLURAL.—
(β) Ucuete, ii.	*Acc.* artuass, xxxv
Εσκεγγαι, ix.	*Dat.* Ανδουνναβο, xxiv.
	Ναμαυσικαβο, xvii
	. . . ουαβ(ο ?), xxiv[b]

THE CONSONANTAL DECLENSIONS

SINGULAR :—	*Dat* Brigindoni, iv
Nom. Elvontiu, xxxi[a].	Subroni, xii.
Frontu (Latin), xxvi.	Αδγενναριγι, x.
Nappisetu, xxxiii[c].	Epadatextorigi, xxxi
Peioco, xxv.	*Acc. Neut.* καντεν, vii (?), xxiv, xxiv[a].
Ουαλικιο, viii.	obal, xxxv.
toutio, xxxiv.	DUAL :—
Εσκιγγορειξ, xx	*Dat* suiorebe, xxxi.
Castor (Latin), xxix	PLURAL.—
Uritues, xxxiii[b].	*Nom.* curises, xxvii.
	Dat. matrebo, xvii.
	Acc Neut. καντενα, vii, xiii, xviii, xxii, xxiv[b].

PRONOUNS, NEUTER SINGULAR

Acc (Adjectival) sosin, ii, vi, xxxii.
Acc. (Substantival) sosio, xxxi.

[1] It should probably be sorted into two declensions at least, but I do not know how: more data are wanted. The spread of the case vowels *e* and *i* took place from the genitive and dative, and in some nouns it reached the nominative and accusative but not in all; see *The Englyn*, p 13.

Out of the number of the inscriptions which have here been discussed a group of eight is suspected by the learned Celtist M d'Arbois de Jubainville of not being Celtic at all, but of belonging rather to some dialect of Italy; they are all written in Greek letters, and most of them are in the museums of Avignon and Nîmes. But as a preliminary to discussing this question it will be convenient to have them and the other inscriptions grouped in two lists for comparison. Let us begin with those which are not contested in the same way.—

- i. . . . . . S. Crispos Bovi . . . . . . Ramedon &c. (Vieil Évreux, Eure).
- ii Martialis Dannotali ieuru Ucuete sosin celicnon.
  Etic gobedbi dugiiontiio Ucuetin in(du) Alisiia (Alise-Ste -Reine, Côte-d'Or).
- iii. Doiros Segomari ieuru Alisanu (Dijon).
- iv. Iccavos Oppianicnos ieuru Brigindoni cantalon (Auxey, Côte-d'Or).
- v. Licnos Contextos ieuru Anualonnacu canecosedlon (Autun).
- vi. *Σεγομαρος Ουιλλονεος τοουτιους Ναμαυσατις ειωρου Βηλησαμι σοσιν νεμητον* (Vaison, Vaucluse).
- viii. *Ουαλικιο Ουερεστ . . . Αιουνιαι* (St.-Saturnin-d'Apt, Vaucluse).
- ix. *Εσκεγγαι Βλανδοουικουνιαι* (Gargas, Vaucluse).
- x. *Αδγεννοριγι Ουερετ . . . , Μαρεοουι* (L'Isle-sur-Sorgue, Vaucluse).
- xi. . . . . *νερ Λιρυιτους Μαναρνος*. Vale. (Neighbourhood of Apt, Vaucluse).
- xii. Subioni Sumeli Uoretouirius f. (Beaumont, near Vaison, Vaucluse).
- xiv. *(Α)δβο(κε)τοο(υιξ) . . . . . ουει ματικαν Ανοτει καρνιτου* (Saignon, near Apt, Vaucluse).
- xv. *Ουριττακος Ηλουσκονιος* (Neighbourhood of St.-Remy, Bouches-du-Rhône).
- xvi. *Βινναμος Λιτουμαρεος* (St.-Remy).
- xix. . . . *μβατι . . . . τοου . . . . τιν* . . . (Nîmes, Gard).
- xx. *Εσκιγγορειξ Κονδιλλεος* ,, ,,
- xxi. *Ματιασο . . . . Κοννουβρ . . . .* ,, ,,
- xxiii. *Κρειτε* ,, ,,
- xxiv[a]. *Κατουαλος* ,, ,,
- xxv. Sacer Peroco ieuru Duorico. V. S. L. M. (Sazeirat, near Marsac, La Creuse).

xxvi. Ratin Briuatiom Frontu Tarbeisonios ieuru (Vieux Poitiers, Vienne).

xxvii. (1) Tib. Caesare Aug. Iovi optum[o] maxsumo su(mm)o Nautae Parisiaci publice posierunt. (2) Eurises. (3) Senani Useilo[ni]. (4) . . . . (Notre Dame, Paris).

xxviii. (1) Iouis. (2) Taruos Trigaranus. (3) Uolcanus. (4) Esus. (Notre Dame).

xxix. (1) Cernunnos. (2) Castor. (3) . . . . . . (4) Smertullos. (Notre Dame).

xxx. (1) Fort . . . . (2) . . . . us. (3) . . . . . (4) . . . . . . (Notre Dame).

xxxi. Bratronos Nantonicn(os) Epađatextorigi Leucullo suiorebe logitoe (Néris-les-Bains, Allier).

xxxi[a]. (1) Oxt]os Uirilios. O]χτος Ουιριλλιο. (2) Ανεουνος εποει. (3) Eluontiu ieuru Aneuno Oclicno Luguri Aneunicno.

xxxii. Buscilla sosio legasit in Alixie Magalu (Sérancourt, near Bourges).

xxxiii. Apronios ieuru sosi[n] Esu[n] (Lezoux, Puy-de-Dome).

xxxiii[a]. Andecamulos Toutissicnos ieuru (Nevers, Nièvre)

xxxiii[b]. Urítues Cingos (? Château de Gussignies, Nord).

xxxiii[c]. Adiantunneni Exuertini Nappisetu (Neighbourhood of Thiaucourt, Meurthe-et Moselle).

xxxiv. Tagos toutio. Sut . . . . &c. (Briona, near Novara, N. Italy).

xxxv. Tetumus Sexti Dugiava Sassadis.
Tome Ecaai obal anat ina (Neighbourhood of Lake Garda).

xxxvi. (Ategnati Drutei f. urnam Goi)sis Drutei f. frater eius minimus locavit et statuit.
Ategnati Druticni carnitu artuass (*or* logan) Goisis Druticnos (Todi, in Umbria).

These thirty-five inscriptions make up the longer list, concerning which there has been no serious controversy as to their celticity; there are a few of them, however, which are partly in Latin, namely, Nos. xi, xii, xxv, xxvii–xxx, and xxxi[a] which is also partly Greek. The contested inscriptions are the following:—

vii. *Ουηβρουμαρος δεδε Ταρανοου βρατουδε καντενα* (Orgon, Bouches-du-Rhône).

xiii. . . . . . *λουσος Ιλλιακος Γρασελουι βρατουδε καντενα* (Malaucène, Vaucluse).

xvi[a]. . . . . . Ουοουοπο Διουι βρατου . . . . (St.-Remy, Bouches-du-Rhône).

xvii Καρταρος Ιλλανουιακος δεδε Ματρεβο Ναμαυσικαβο βρατουδε (Nîmes, Gard).

xviii. Κασσιταλος Ουερσικνος δεδε βρατουδε καντενα Λαμι Ειvουι (Nîmes)

xxii. . . . . Αδρεσσικνος . . . . . ο]υι βρατουδε κα[ντενα] (St. Côme, near Nîmes).

xxiv. Εκιννος Ριουμανιος Ανδουνναβο δεδε βρατουδε καντεν (Collias, Gard).

xxiv[b]. . . . . εουλο . . . . . ουαβ(ο) δεδε *Al* . . . . βρατ)ουδε καντεν. (Found near the great Source at Nîmes).

To these should perhaps be added a fragment of an inscription found at Substantion near Montpellier and partly restored by Holder as . . . . . INOVCI . Δ(ΕΔΕ). The other localities in question are Nîmes, St. Cosme or Côme, Collias not far from the Pont du Gard, Malaucène on the left side of the Rhone, St.-Remy, and Orgon near the Durance. the area implied as belonging to the tribe or tribes that set up the inscriptions of this group does not appear to have been a very large one.

An article by M. d'Arbois de Jubainville in the *Revue Celtique*, xviii, 318-24, may be taken as embodying his reasons for thinking that this group of inscriptions is not Celtic. He enters first into questions of chronology and arrives at the conclusion that the Gaulish occupation of the district in question may be compared in length with that of the French domination in Alsace, and adds the following words: 'Deux siècles ne suffisent pas pour imposer définitivement dans un pays l'emploi exclusif de la langue du peuple conquérant.' In answer to this we have, however, to say that one is not clear as to the date of the inscriptions in question, and that no chronological argument can be of much avail here until that date is more narrowly defined than has as yet been done.

M. d'Arbois's next argument is intended to prove that the forms of the individual words in these inscriptions fit into the pronunciation of spoken Latin from Ennius to Cicero or later. This he does with comparative ease, but when he tries to go further and show that they fit better into Latin than into Gaulish, he is less successful, for besides a number of minor points on which he is perhaps open to criticism, his argument is inconclusive because nobody knows enough about early Celtic to be able to say what forms were inadmissible.

The data for one side of the comparison are too slender in other words no safe comparison at all is possible as to the details

The same remark applies to his discussion of βρατου-δε, where he treats δε as a postposition as in the Latin combination *vobis-cum* and *quo-ad*, to which he adds from Cicero 'Quibus *de* scriptum est,' and from Horace 'puellis *de* popularibus,' which, by the way, I cannot admit as a parallel to βρατου-δε, and from Lucretius 'tempore *de* mortis,' together with others of the same kind in Latin. He cites authority for the frequent occurrence also of postpositions in Oscan and Umbrian; but who is to say that they were not as frequent in Celtic or more so? He settles this with the rash negative: *Il n'y en a pas d'exemple celtique.* According to some scholars the Celtic language most exactly in point would be Welsh and Breton, and here are a couple of Welsh instances at once, *pa-h-am* (for *pa-am*), and *py-rag* or *pa-rag*, as in *paham y deuthoch?* 'why (literally 'what for') have you come?' and *Gwn paham y deuthoch* 'I know why you have come.' This *paham* is one of the commonest combinations in the language, but the other *py-* or *pa-rag* is now obsolete in Welsh, whereas it is in common use in Breton as *pê-râk* 'pourquoi.' For similar locutions in Modern Irish see Dinneen's *Dictionary*, s.v. *cá* and *as*, 'out of, from.' Comparing roughly the Romance languages with Latin from which they derive, one finds that they make their prepositions into postpositions less often than Latin did; so perhaps one would not be wrong in guessing that such cases were more usual in early Celtic than in the Celtic languages of the present day, namely Welsh or Breton, and Irish Gaelic. Lastly, the possibility is not to be wholly forgotten, that βρατουδε is not to be explained at all with the help of *de* 'from'. see No. vii, p. 291 above.

The learned Celtist sums up his case in the following terms 'Ma conclusion est que les inscriptions précitées nous mettent en présence d'un dialecte italique, usité dans la Narbonnaise sous la domination romaine, concurremment avec le latin et avec le gaulois, sans parler du grec chez les Marseillais.' But what a peculiar people they were, who, though speaking an Italian dialect like Latin, preferred to have it written in Greek characters. It is stranger still that they chose all to be known, not by Italic or Greek names, but by Celtic ones. For M. d'Arbois admits this when he says 'Les inscriptions précitées paraissent être des dédicaces. Tous les noms des personnages qui font ces dédicaces semblent gaulois; quant au reste du texte de ces dédicaces il appartient, suivant moi, à une langue italique.' The celticity of the nomenclature is a fact which is, it seems to me, well nigh impossible to get over; but the significance of it is not fully

expressed in M. d'Arbois's admission. For the names not only seem Celtic, but the patronymics also are Celtic in their formulae, which is still more convincing. Take for instance, Κασσιταλος Ουερσικνος, 'C. son of Ųeisos,' and Αδρεσσικνος, 'son of Αδρεσσος,' in xviii and xxii, and compare the case of Iccavos Oppianicnos, 'I. son of Oppianos,' in iv, found in the Côte-d'Or, or Andecamulos Toutissicnos, 'A. son of Toutissos,' in xxxiii[a], belonging to Nevers both have the verb *ieuru* and are supposed to be Gaulish. Next may be mentioned the Collias inscription, No xxiv, beginning with Εκιννος Ριουμανιος, 'E. son of Riumanos,' where the formula is the same as that of Frontu Tarbeisonios, 'F. son of Tarbeiso,' in xxvi. One might here also take into account the forms in -ακος, such as Καρταρος Ιλλανουιακος and Ιλλιακος in xvii and xiii respectively, which claim comparison with such a name as Anųalonnacos in No. v, which is an *ieuru* inscription · see p. 284 above. The points of identity to which I refer mean vastly more for the view here advanced than the mere use of Gaulish names. To them must be added the weight of evidence supplied by the occurrence of the peculiarly Celtic word διουι, that is dīųi = dēųi, 'to the goddess' see the remarks made at p 305 on inscription xvi[a], lost at St -Remy

M. d'Arbois de Jubainville has done a service to Celtic epigraphy in challenging the celticity of the group of inscriptions in question · to me at any rate they now appear more certainly Celtic than they did before his verdict led me to examine them more closely. Instead, however, of making them into an Italic group, as M. d'Arbois de Jubainville is desirous of doing, I am greatly inclined to regard them as Celtican. They unfortunately supply us with no obvious test words, but that leaves it possible for us to regard them as being in the language of the Coligny Calendar and of the Rom Defixiones. The geographical area, be it noticed, which the challenged inscriptions cover may be said to take in the neighbourhood of Apt, where we have, at Saignon, an inscription with *carnitu*. It is but natural accordingly to suppose that verb to belong to the same language; but that identical form has been found in the Todi inscription, while its plural occurs on the Briona stone now at Novara This would mean that Celtican once extended across the Alps far down into North Italy. In another direction we have the fragment at Évreux and the Buscilla legend on a vessel dedicated to a divinity at Alesia that they are both in Celtican was suggested in my previous paper Their interest for the moment, however, is eclipsed by the fact that the language which I have been obliged to call Celtican seems to have covered the area which, *par excellence*, belonged to the ancient Ligurians.

II

Besides the foregoing inscriptions, the Coligny Calendar in the Lyons Museum claimed a large share of my attention. Soon after it was discovered, I had a passing look at it without being much the wiser, and most of my paper read to the Academy last year was devoted to it. So last September I was determined to examine it from beginning to end. With the kind permission of M. Dissard, the learned head of the Museum, I spent a week collating the fragments, with the 'Reconstitution' of them into months by M. le Commandant Émile Espérandieu, and with the coloured plate or chart of the whole published in 1898 as a supplement to the *Revue Épigraphique*, No. 90. It may here be mentioned that another edition of that chart was issued in the *Revue Celtique* for 1900, but it lacks final revision by M. Espérandieu.

I may begin my corrections by mentioning the fact that in my former paper I forgot to say that the statue of the god, whom we may now call Rivos, had figured in more than one publication for instance, in M. Salomon Reinach's *Répertoire de la Statuaire grecque et romaine*, vol. iii (1904), p. 234, where he has placed it among the Apollos. It appears also in the Piot *Monuments et Mémoires* of the Académie des Inscriptions, vol. x. pp. 61–90, where it has a plate (No. ix) devoted to it, and an elaborate article, written by M. Joseph Buche, to prove the god a Mars. I may add that I have asked the opinion of several of my colleagues, and they also are inclined to call him a Mars; but M. Reinach sticks to Apollo, and suggests to me a luminous parallel between Augustus (in the rôle of Apollo) giving his name to the month of August, and Rivos (the god of the Coligny Calendar) giving his to Rivros, approximately the same month. For references to Augustus as Apollo, see Mr. A. B. Cook's 'European Sky-God' in *Folk-Lore* for 1905, p. 310.

Column 1, with an INTERCALARY MONTH beginning with the second line (Espérandieu's 'Reconstitution,' p. 3[1]).

The big letters MID are followed by a bit of the top of the next letter, which cannot, I think, as formerly suggested to me, be an A · it looks rather as if it had been X.

Day i. The second line begins with GIA, that is, with G not C. To discriminate, if possible, between G and C was one of my chief objects in collating the Calendar.

Day, ii. The second line has nothing in sight after SONNA, and I conclude it was treated as a complete word.

Day vii. The beginning of the entry seems to be M, not N.

Day ix. The letter following EDVTI seems to have been C, G, or O, possibly the upper portion of an S.

Atenoux. vii. This reads NSDS SAM[O]NI ANAGAN
INNIS .... TIT

The letter beginning the word following INNIS cannot, I think, have been R, P, or D, but rather I, V, M, or N.

Atenoux. viii. This incomplete entry stands more correctly thus:—

NSDS .... TO
INN ... ...

In fact the TO of At. viii seem so close to the TIT of the previous line that there appears to be no room for a line between. That is, Messrs. Dissard and Espérandieu's arrangement proves correct as far as I could judge; for some difficulty was occasioned by the right-hand fragment with the ends of these entries, having fallen about two lines out of its place, as the result, I should suppose, of shifting the glass case some time or other since the placing of the pieces by M. Dissard. My guessings in my *Celtae*, p 89, have to be corrected accordingly. The note ending the intercalary month has POG, with a distinct G. The C of COB is not decisive in its form. The X of OXT is imperfect, and the T is gone; imperfect also is the first limb of the first A of ANTIA.

SAMONIOS[1] (Espér., p. 4[1]).

iii. Here also we have a decided G in EX I NGIDVM.

v. There runs a fracture right through the supposed X of RIXRI, and it is continued through the second I of INIS in vii the shadow cast prevents one from seeing clearly either letter through the glass, but I have no doubt about the I and not much about the V, instead of what appears through the glass as X. I should have mentioned that the line of

vii. the fracture is not given correctly in the Chart. I have a note that the whole entry * for vii is N DVMANN INIS · R

* M. Dissard was kind enough to promise, that, in case of my notes proving incomplete, I might write to him to be reassured on various minor points which might appear doubtful Such have an asterisk in these remarks. Here my query is whether the entry begins with N or with ND as in the 'Reconstitution.'

viii. There is something which looks not very unlike an angular S just before MO, but it may be no part of the writing

N B. The detached bit provisionally placed near the bottom of Dumannios in the first edition of the Chart has been since removed to the Atenoux. of Dumannios in Col 11 of the 1900 Chart and in the 'Reconstitution,' which would be here indicated as 'Esp., p. 5[4],' or fourth year on the page representing the month Dumannios. it contains the word RIVRI three times.

Col. 2, beginning with RIVROS[1] (Esp., p. 6[1]).

xiii. This numeral is not there, and the reason for its absence was not lack of space: was it objection to the number 13? The whole line is DEV̊O RIVO RIVRO(S)· parts of the RO are still visible, though the S is gone there was room for it The first arm of the lower V of DEV̊O is doubled, the outer line being thinner than the other the engraver seems to have hesitated and to have thought of a way of doubling the V, thus V̈, which, however, was not what he finally adopted.

At. ii. Of this entry there remains a D, but it may have belonged to the previous day, for the numerals are gone.

ANAGANTIOS[1] (Esp., p. 7[1]).

vii, viii, ix have a decided G in OGRONI in the three instances.

At. xii. Where there should have been a D there is a patch of verdigris which makes it impossible to trace the letter.

Col. 3, beginning with GIAMONIOS[1] (Esp., p. 10[1]).

N.B Near the top of this column is now placed a piece which in both Charts is to be found in Col. 14 (Anagantios): we shall return to it when the latter is reached.

At. vii The B of AMB has had its top punched off in making the peg-hole there.

ix. Here the B of AMB is actually situated beyond the peg-hole. Both go to prove that the peg-holes were made after the lettering, contrary to what I rashly suggested in my former paper, p. 88.

SIMIVISONNIOS[1] (Esp., p. 11[1]).

xv. Before IS EQVI, there are traces of V, belonging no doubt to SEMIVIS.

At. xiii. The entry has an AMB, thus D AMB IVOS.

EQUOS[1] (Esp., p 12[1]).

ii. The reading is PRINI LAG IVOS, with the second vocable ending with G.

xiv. M D SEMIVIS The D is preceded by an M not in the Chart.

xv. M D SEMICANO, with C rather than G.

ELEMBIVIOS[1] (Esp., p. 13[1]).

ii. The whole entry is gone except the final S of IVOS, which stands beyond the peg-hole, that is in Dumannios, day iii, in the column to the right, as shown in the 1895 Chart it is accidentally omitted in the later Chart.

At. ix. EDRINI not EDRIN.

Col. 4, beginning with EDRINIOS[1] (Esp., p. 14[1]).

viii This seems to end with NT doubtful only is the N.

At. iii. The I before AMB is still partly there.

CANTLOS[1] (Esp., p. 15[1]).

i. The name of the previous month is this time AEDRIN.

At. ix. This seems to have begun with ITI and ended with R, which is to be found beyond the peg-hole in the contiguous month of Anagantios. What can the whole entry have been? Hardly ITI N INNIS R, since ITI and the two other arrangements probably refer to certain hours of the day as indicated by the sundial, and do not occur before N or NS, which seem to stand for a word for night. It is more likely to have been like the entry in Simivisonnios[2], which is also At. ix, namely, ITI D AMB R; but as we want a longer entry, it had possibly a month's name inserted somewhat thus, ITI D EDRINI AMB R compare Simivis[3], At. iii, with D EQVI AMB.

At. x. This begins with a D, which is still there, alone.

At. xiii. The IV of IVOS are still there, only the OS are gone.

SAMONIOS[2] (Esp., p. 4[2]).

ii. I thought I could identify the MD of this entry, though they have been omitted in the Chart and almost wholly in the 'Reconstitution.'

iv. Here I can find only D, without M or N preceding it.

At. ii. The entry is IIT D TRINVX SAMO.

DUMANNIOS[2] (Esp., p. 5[2]).

i. The entry seems perfect and complete, SAMON PRIOVDIX IVOS, without anything to suggest a division or abbreviation in PRIOVDIX.

v. The entry is . . RINN LAGIT with a G, but query *RINNI.

viii. The I of SAMONI is, I think, there

Col. 5, beginning with RIVROS[2] (Esp , p. 6[2]).

i. . . NAGANT with a very decided G.

iv. . . . G RIVROS, with the G of BRIG ; but see cols. 8 and 11.

v. There is . . . NIS R there: the latter has been accidentally omitted in the Charts and the 'Reconstitution.'

viii. I have a note querying * the L of LOVD in favour of I.

xiii. What is left begins with the latter part of some such a letter as M, and after a space comes IVG RIV: the G seems here certain. Unfortunately the corresponding entry in Col. 11 is not in a state to help us on this point. This entry looks as if originally DM IVG RIV.

At. viii. The entry is . . . IVX ANAG with traces of the bottom of some more letters of PETIVX: compare PETIVX two lines lower, and PETI RIVRI ANAG in Col. 8.

At. xiii. Not M D but II† D.

ANAGANTIOS[2] (Esp., p. 7[2]).

The headline has a very decided G in ANAGAN like that of OGRON at the head of the ensuing month. The name of the former is doubtless to be everywhere corrected into *Anagantios,* and the etymology suggested in my *Celtae,* p. 106, cancelled.

At. iii begins with †II, and the usual sequence suggests in At. iv the combination I†I, but the engraver blundered into II†, and then he made a lower horizontal line through the second and third perpendiculars · At. v is normal, II†.

At. ix. For INIS read IN.

N.B. In the 1898 Chart both Ogronios and Cutios were here left empty, but in the 1900 Chart the portion of Cutios placed in Col. 12 in the former Chart (and in the Reconst.) is found transferred here in the latter Chart, but it has been shifted again, namely, to Elembivios in Col. 13 where I found it.

Col. 6, beginning with GIAMONIOS[2] (Esp., p. 10[2]).

The head line is (Giam)ONI . the I is there.

EQUOS[2] (Esp, p. 12[2]).

N.B. The fragment with what remains of days xiii–At. iii has been shifted by M. Dissard to the corresponding place in Equos in Col. 16.

ELEMBIVIOS[2] (Esp., p. 13[2]).

i, ii, iii, iv, v. The S of IVOS in these lines is not certain.

vi This has not the letters AMB they are in the previous line *.

ix. In this as well as iii the reading is LAG, not LAC.

Col. 7, beginning with EDRINIOS[2] (Esp., p. 14[2]).

It is difficult to make out what letter ends the name of the month in the head line · I do not think it can be S. It is more like a tall O, so one should suppose the original letters to have made EDRINIO.

xiii. The reading seems to be IꝉI, inexact for IꝉI, and then, I think, an M comes, not a D.

xiv. Between this entry and the next there is a blank space which would suffice for about two lines of writing · it is the measure of the extent to which the engraver had got out of his reckoning. The ATENOVX following proves to be on a level with that heading in other months.

CANTLOS[2] (Esp., p. 15[2]).

iv. The entry is PRINNI LAGE with a decided G.

xv. TIOCOBREXTIO has its C all right, the E may be I.

At. xiv seems to begin with IꝉI D.

DUMANNIOS[3] (Esp., p. 5[3]).

At the end is DIVORTOMV, but the final V is difficult to trace on account of the verdigris.

Col. 8, beginning with RIVROS[3] (Esp., p. 6[3]).

iv. The entry is MD BRIG RIV, with room for one or two more letters, but there is verdigris where the other letters of RIVROS should come. The last letter of BRIG looks somewhat dubious, G or C.

viii. I can only read PRINI LO. The LO are at a distance from PRINI, and close to the edge of the column, they are by no means certain As to the wide space intervening compare PRINNI LAG in Anagantios, a little lower in the same column.

At. viii. The entry is D PETI RIVRI ANAG, but the I of PETI is not quite certain, as it is in a break badly jointed.

At. x. This reads as follows N RIVRI D RIVRI IIꟊ M. The top of the N is there; the D has a dab of verdigris, which makes it look at first sight like a C reversed A part of the M is gone with the punching of a peg-hole.

ANAGANTIOS[3] (Esp., p. 7[3]).

The name of the month as abbreviated in the head line was ANAGTIO the G is certain, and so may the AN be said to be, though they are no longer intact. ANAGTIO stood for *Anagantio-s* had it been a complete word (*Celtae*, p. 75) it ought to have been written ANAXTIO, and not ANAGTIO.

i. What is left of this entry is M [D] RIVRI EXOIVO. There is a narrow piece lost between M and RIVRI, where there was probably a D. A peg-hole of the second intercalary month encroaches on the O of IVO, but it only covers a part of it.

vi. PRINNI LAG has the wide space to which attention has already been directed. it would seem to indicate that the things represented by PRINNI and LAG respectively were not essentially connected with one another.

OGRONIOS[3] (Esp., p. 8[3]).

At. xii. The entry is N INIS R, as in Col. 15.

Col. 9, beginning with a four-line introduction to the SECOND INTERCALARY MONTH (Esp., p. 3[2]).

Line 1. As far as I could judge through the glass, this line would be rendered complete by inserting a V, so as to make it CIALLOS BVIS.

Line 2. This is spaced SONNO CINGOS.

Line 3. The corner of a letter at the beginning of this seems to be the top of an A: so the reading would be AMMAN·M·M XIII. I have no note of my finding a point between the last M and the numeral.

Line 4. The reading is ..... LAT·CCCLXXXV. There is a space between LAT and the numeral, but the presence of the point is somewhat doubtful. There is room for some equivalent of 'id est' before LAT.

Line 5. What is left of the line is ANTARAN·M, but close before it one observes the top corner of a preceding letter, which I have failed to identify; so I guess the writing to have consisted of an abbreviation of the name of the month, followed by *Cantaran·M.*, for *canta-rannin*

matus, signifying that it was lucky as to its first part. The compound would make in O. Irish *cétrann*, later *céadrann*, 'first part,' and here it seems applied to the first fifteen days of the month as distinguished from the *ate-nouxtion*, 'the subsequent series of nights' in the month. Let us call the month *Ingendios*, and the syntax of the line will be this *Ingendios canta-rannin matus*, 'I. (as to) its first part lucky,' which implies that the other part was not always lucky possibly this means that the month varied in length, contrary to my suggestion (*Celtae*, p. 77), from one lustrum to another. The Calendar now proceeds at once to the days in their order, but here occurs a most serious lacuna, which I suggest filling in outline somewhat as follows —

(i) .... SIMIVIS
(ii) .... Du]MANNI IVOS
(iii) .... Du]MAN IVOS
(iv) .... Riv]RI IVO
(v) .... Pet]IV RIVRI AN
(vi) ...... ANAG
.... ROG (? ROC)
(vii) N ....
viii. D ....
ix. N O ....
INIS ....

The supplying of PET in the fifth day is suggested by Rivros At. viii. PETI RIVRI ANAG (p. 358).

Before ANAG in the sixth day there are traces of a letter which I have not identified. The entry for this day seems to have occupied in all no less than eight lines, though we have got only the fag ends of the first two of them. Then comes a certain amount of writing again from vii on.

xv. This entry consists of DS MA·NS RIVR, with the MA forming a ligature, M.

At. ii. Read ŦΠ MD QVTI IN OGRO. This last O is not quite certain, but I thought I could trace it. Whether the initial symbol was meant to differ from ŦII I cannot tell.

At. iv. D GIAMONI, with G as in OGRO.

At. vii. N GIAMONI
ELEMBI
.
.
At. viii N GIAMONI
AEDRINI

Here one finds considerable space between Giamoni and Elembi and the next Giamoni, the engraver having to make this intercalary month fill the room of two ordinary months as in the case of the other intercalation.

At. xii. This seems to have I†I preceding M D RIVRI.
At. xiv. In this entry the reading is II† D OGRONV, ending with V.

GIAMONIOS[3] (Esp., p. 10[3]).

This name, abbreviated GIAMON, begins with a decided G, and CIA in the next line is to be corrected into GIA; so also in other instances of the name.

vii. The entry is II† M D SIMIVI TIOCBR.

SIMIVISSONIOS[3] (Esp., p. 11[3]).

viii. EQVI PRINNI LAG the G is there, but has been encroached upon by a peg-hole.

Col. 10, beginning with EQUOS[3] (Esp, p 12[3]).

ii. PRIN LAG IVOS.

ELEMBIVIOS[3] (Esp., p. 13[3]).

viii The top of the two first letters of TIOCOB is gone.

EDRINIOS[3] (Esp., p. 14[3]).

viii. .... CANTL.
ix. .... CANTL.

These are all on a twisted piece of the bronze, and for that reason I could not see the foot of the second L through the glass: I have little doubt that it was not I—the inclination was wrong for T or I.

xi. D ANB.

The N for M in ANB is there, and is to be put down as a slip on the part of the original engraver.

CANTLOS[3] (Esp., p. 15[3]).

i. M* D AEDRINI IVOS
iv. PRINNI LAG. The G is certain
vii. SAMON PRINI LOVD. The last might possibly be read IOVD, but the base of the first letter looks large for I, and falls too far below the horizontal direction.

Col. 11, beginning with SAMONIOS[4] (Esp., p. 4[4]).

ix. D DVMAN ....

DUMANNIOS[4] (Esp., p. 5[4]).

v. PRIN ....

N.B. In the Atenoux. of this month M Dissard suggests that there should be placed three detached fragments, the last of which has an entry beginning with D TI.

RIVROS[4] (Esp., p. 6[4]).

iv. . . . . . . IG RIVRI.

vii. . . . . . . ANAGTIOS, which is to be extended into Anagantios, the next two days show NAG as what is left of ANAG.

xiii. . . . . . IV · G · RIVRI. The verdigris makes it impossible to say for certain whether we have a G or a C here; but compare Col. 5 and note the abbreviation stops here. I propose to read in full *iṷo-gotṷatro*, and to translate 'To the *ivos*-priest the crops.' This agrees absolutely with the first-year entry, except that it is there more piously put with the god Rivos as the direct recipient. The *ivos*-priest was presumably the one who had to do with the many feasts or functions held probably in the god Rivos's honour, and marked in the calendar IVOS, IVO, IV. As to gotṷatros, 'priest, a divinity's mouthpiece,' see Holder, s. v. gutuatros, and M. d'Arbois de Jubainville, *Les Druides* (Paris, 1906), pp. 1–7. The IVG of Col. 5 (p 358) suggests a shortening of the compound into *iṷ-gotuatro* to be compared with *Rim̥manios* from *Riṷomanios* in Inscription xxiv.

xv. . . . . D* S.

ANAGANTIOS[4] (Esp., p. 7[4]).

iv. M D OCIOMV RIVRI. I cannot trace the first O completely · a dab of verdigris nearly covers it.

v. N INIS · I could not trace the R to complete the formula.

vi, vii, viii, ix. D . . . . INNI: The original in vi may perhaps have been OGRONI as in the three next days, the first two of which are still legible, while only NI of the third is so.

At. iv. Here AMB, which M. Espérandieu rightly found inadmissible, turns out to have been cancelled by means of a horizontal line across each of the three letters · I am not sure that the B had ever been completed. The engraver made another slip below, namely, at the end, where he placed an X in front of the word DIVIRTOMV.

Col. 12, beginning with OGRONIOS[4] (Esp., p. 8[4]).

The name of the month in the heading is mostly gone, and what is left is puzzling, being ROM, which would seem to mean that the engraver had made NI into M.

At. i. †II M* D QVTIO.

CUTIOS[4] (Esp., p. 9[4]).

N.B. As arranged when I saw it in September the Calendar has nothing left in this month except a fragment which, in the 1900 Chart and in the 'Reconstitution,' will be found placed in Dumannios[4] in the Atenoux. from iii to x. in Col. 11, it is also the detached piece near the bottom of Dumannios in Col. 1 in the 1898 Chart. As it has three consecutive days with the word RIVRI, it fits into one of the Dumannios columns in point of season, and not at all into Cutios. But I understood M Dissard to say that he had been trying to adjust the fragments with due regard to the thickness of the bronze which varies considerably. Furthermore the contents of Cutios[4], as given in the 1898 Chart and in the 'Reconstitution,' appear in the 1900 Chart in Cutios in Col. 5, but unless I have blundered in my notes they have been since moved to make up Elembivios in Col. 13 It is needless to say that this latter move also would not suit the almanac view of the case.

GIAMONIOS[4] (Esp., p. 10[4]).

At. viii (n mi)S R.
At. xi. (n) INI R.

SIMIVISONNIOS[4] (Esp , p. 12[4]).

i GIAMO PRINI LAG. The last G is encroached upon by a peg-hole, which has caused a slight curling of the bronze where that letter ends, and makes it hard to distinguish G from C.

vii (? viii). M D TIOCOBREXTIO. The T is made in both instances taller than the other letters, the C is certain, the two ends being given the same form, whereas in a G the bottom differs from the top.

Col. 13, beginning with EQVOS[4] (Esp., p. 12[4]).

ii. PRINI LAG, but the last letter being imperfect one has no ocular proof that it is G.

viii. PRINI LAG with a decided G.

ELEMBIVIOS[4] (Esp., p. 13[4]).

N.B. This month is empty in M. Espérandieu's 'Reconstitution,' but in the Charts it has a piece with incomplete entries covering the days from vi to xii. When I saw the Calendar this had been pushed down the column to the corresponding place in the next month, Edrinios, and there it has prefixed to it a fragment with numerals from i to v; but the compound fragment contains no month name · I have identified neither piece in M. Espérandieu's 'Reconstitution.'

Col. 14, beginning with SAMONIOS^{5} (Esp., p. 4^{5}).

At. iii. D AMB.

DUMANNIOS^{5} (Esp., p 5^{5})

At. xi. D AMB.

At. xii N INIS R.

At. xiv. M D. This is doubtful, and may have been NSDS.

RIVROS^{5} (Esp., p. 6^{5}).

(iv) . . . . . . TIO RIVRO Before RIVRO the IO are certain and the top of the T is visible; so the reading is TIO.

ANAGANTIOS^{5} (Esp., p. 7^{5}).

(ii) D . . . . . . CORIVRI. After the D there are scratches and the bottoms of CO or GO. Then we seem to have the bottoms of the letters RIVRI without much doubt. So I would read GO · RIVRI, perhaps OC GO (? OCO) · RIVRI, meaning that the *gotuatros* or priest has his crops safely at home by him on that day, that is, two days earlier than his fellow tribesmen would have theirs.

(iii) D IVO
(iv) M D OCIOMV RIVRI
(v) N INI R
(vi) PRIN LAG
(vii) D
(viii) D
(ix) D
(x) (D)
(xi) (D) AMB

N.B. All this piece with its lines ii–xi M. Dissard has moved to the top of Col 3, that is, into the winter month of Giamonios, where from the almanac point of view it makes no sense, as it seems to belong to the summer half of the year. Unless the thickness of the bronze makes it impossible it would seem to fit exactly into Anagantios in Col. 5, that is, into that month in the second year. The remaining piece given in the Chart to Anagantios At. iii–xiv. has now been shifted to the right to the earlier half of the contiguous month of Simivisonnios, but as it contains no month name the difficulty is not of the same acute nature.

Col. 15, beginning with OGRONIOS^{5} (Esp, p. 8^{5}).

At. i. M D QVTIO.

CUTIOS^{5} (Esp., p. 9^{5}).

ix. N INI R.

GIAMONIOS^{5} (Esp., p. 10^{5}).

Of the month's name in the head line only MOM is left, seemingly supplying another instance of M for NI.

Col. 16, beginning with Equos[5] (Esp, p. 12[5]).

ii. PRIN LA . . . I did not find the G of LAG.

vii. D SIM . I think SIM is there, though faint.

viii. PRINO LAG

N.B. Here comes the bit removed from Equos in Col. 6, and extending to At. iii; see p. 359.

At. iv. . . . . . . SI. This is not quite certain. In any case the abbreviations to SIM and SI of the month name Simivisonnios occur, it seems, nowhere else in the Calendar.

In the course of the same ramble I made an excursion from Poitiers to Rom, in the Department of Deux-Sèvres, in order to examine the two inscriptions on the lead published in the *Revue Celtique*, xix 168–176, by M. Camille Jullian in my paper they come at p. 107 and occupy the subsequent ten pages. I put these references forward because I wish to confine my remarks as nearly as possible to the corrections which I have to make. First of all let me say how to find the locality. You take the train for Angoulême and Bordeaux and descend at a station called Couhé Verac some twenty miles from Poitiers. The village of Rom is thirteen kilometres from the station, and the little town of Couhé itself is six kilometres, and runs an omnibus to meet the trains. At Couhé I found one of the sons of M. Blumerau awaiting me with a carriage: M Blumerau is a public notary living at Rom, and he owns the land on which he has found the inscriptions and numerous other ancient remains, which are to be seen at his house. M. Blumerau is greatly interested in them, and he and his family entertained me most hospitably during the day and a half which I devoted to the study of the inscriptions. The country around is flat or undulating, but I did not see it to advantage as the weather was bad. I was especially disappointed to find the bed of the Dive green and nearly dry; but M. Blumerau assured me that the width and depth of the channel of the Dive prove that it must once have been a much more considerable stream than it is now—it is a stream still in winter. He thinks its reduction has been caused by the clearing of the country around of its woods. To this should perhaps be added that its course is in a limestone district, which may leak, and does so here and there. Our Dibona is called la Dive du Midi, as there is another Dive somewhere between Tours and Nantes.

On carefully collating **Inscription A** with M. Jullian's reading, I found exceedingly little to call in question · my own reading, which was only rendered possible by his, is as follows.—

1 APЄ CIALLI CARI
2 ЄTIHЄIONT CATICNTO
3. NA DЄMTIKKIЄ CLOTU
4 LILA KЄ ΔЄMTITIONT
5. ΔI CARTAONT dIΔO
6. nA KOKIO ΔЄUI PIA
7 KOKIO PVRA KOKIO
8. ZOUIKA KVЄIOTIЄT
9. KOKIO POURA . . . . . .
10. KUA dЄMTI A . . . . . .
11. ΔUNT NAUOUKЄIA

The A in these inscriptions never has the cross bar; the E in this one is always rounded, and the R is left open, being altogether of a decidedly cursive form. The T when not in combination with another letter tends to have its stem twisted forward at the bottom. The V varies from that form to a fully developed U, and affords ample room for the marking off of a small V inside it thus, U, so as to represent VV, *uu* or *w*, as in *deuui*, for that and not *deei* is the reading in line 6. The D in line 3 approaches that shape, but the others come nearer our d they come still nearer to Le Blant's instances, dated 568 (Narbonne) and 582 (Truilhas). The B is a peculiar character, forming a modification of that form reversed and resembling Le Blant's second of the two first instances (from Rome), under the heading '*Inscriptions non datées*,' p. 12, only that ours is better formed. Line 2 begins with a somewhat broken Є, and it contains two instances of a ligature which is the same for NT and ANT, an ambiguity readily understood when it is remembered that the A has here no cross bar In *ctiheiont* it is *nt*, but in *Caticanto* we require a vowel before the *nt* the character is N, with the top stroke of a T on the upper end of the last limb of the N. Unfortunately it could also be treated as an Λ with a T joined to it, but that seems to be ruled out by the fact that in the first part of the name the Λ and the T are written separately · it remains that one should regard the word as *Caticanto* rather than *Caticato*. In line 3 the KI are somewhat imperfect, and the L is disfigured by accidental scratches. In line 4 it is hard to say whether LILA or LILLA is the right reading: here we have the ligature for NT, as also in line 5, where the first B and the C show some accidental scratchings. the

final O is imperfect. Line 6 begins with П for N, and the P of PIΛ has the lower end of its stem twisted forwards like that of the Ƭ. Le Blant gives no less than four undated instances of this form of P. In line 7 O P are damaged, and the second SI are partly gone. Line 8 is rather worse both Ƙ's are gone except the characteristic top twig the I before the first Ƙ is also very slight. Line 9. the P resembles the one already mentioned: the Λ of POURΛ is imperfect, and I have failed to read what follows it. Line 10 is also bad, and I could scarcely say that I could trace the MTI. I could read nothing for certain after the A, but I could see nothing inconsistent here with M. Jullian's reading. Line 11: here the second U is rather indistinct, and the last three letters are very much so. Another great difficulty attaches here to the third character between the U and the N, for it is not an N as read by M. Jullian. it is more than N for it ends with the top stroke of a T. Are we to read *dunt* or *duant*? The former might be part of a longer verb ending in *-unt* = *ont*, while the latter might be the whole of a verb—in either case we have a plural; but there is a third possibility, namely, that we are to read A and T joined together, which would give us a singular form *duat* or *-duat.* Against this must be placed the fact that we have AT written separately in line 2, as already pointed out. I am not prepared with an interpretation, but I am inclined to prefer *duant*, and in any case to suppose that in what follows we have a dependent negative clause.

N.B. The extreme corner of the lead with the greater part of the initial *d* of this line is ready to drop off: there is no writing on the other side of it, so it is possible to mend the lead on that side without any damage being done to these invaluable documents.

Inscription B on the other face of the piece of lead is much more irregular in its lettering than that already described. As a rule the letters of side *B* slope more and show more minuscule forms; but the stem of the T is mostly straight. One of the most troublesome letters here is G: one of its cursive forms is Ƶ which we had in *govisa* in Inscription *A*, and the other is Ƶ which tends in some of the instances to become sprawling and untidy. It occurs here in the case of the spirant which I represented by a Greek Γ in the former paper, p. 111, but its being so used is perhaps only an accident, for we have Ƶ also in HЄƵƵO, and Ƶ alone in POƵЄΛ. My reading of the inscription is the following:—

1. TЄ VORИImo
2. ЄHƵΛ ΛTИTO TЄ HЄƵ
3. ƵO ΛTΛИΛ TЄ COM

4. PRIATO ϯoϯio dERTI
5. noi pommio ATЄHO
6. TIϯϯЄ POZЄA TЄ PRI
7. AUImo ATANTA TЄ
8. ONTЄZATIm ЄZO
9. ZIA TЄ VORNImo
10. APЄ ϯoϯio dERTI
11. IMO NTAdЄMTIϯϯЄ
12. VPЄ . . . A . . . . . .

In line 1 the ligature for AU is badly joined, but its last limb bulges slightly outwards and is altogether unlike the tall sloping I of *Imo*. In line 2 M Jullian gives a ligature which he reads as ANT, but I found that the T is all there, so the ligature is confined to the AN preceding it. In fact there is in this inscription no instance which one is obliged to read as ANT, and we have trouble enough without it. For we have N to be read AN: the only time an *n* occurs here out of combination with another letter it is found written n, namely, in line 5; and we have an N with the top stroke of a T, a ligature to be read sometimes as NT and sometimes as A and T merely joined together. We have the joined AT in the first syllable of Atanto and the ligature for AN in the second. The last three letters of this line are very puzzling the middle one seems to be an Є preceded by what seems to be the first half of an H, but I cannot trace the horizontal line produced quite to join the Є, though that seems to have been intended. The last letter seems to be a G of the kind already mentioned as Z, and I think we have a somewhat simpler instance of it in line 6, where M Jullian has taken it to be either a T or a G. I regard it as more probably the latter, with the horizontal line not joining the top of the stem but intersecting it—a form of Z. Line 5 ends with an uncertain O, which M. Jullian thinks possibly an Є. In line 8 the letter Z is a very straggling specimen in the first instance, while as the last letter but one it is very much simpler I agree with M. Jullian in thinking that the same letter was meant. In line 9 the ligature for AU comes somewhat nearer AV, but the second joint is damaged so that it is not easy to judge of the exact shape, except that it is still different from N. In line 11 I cannot read NA because the first of those two characters, the N, finishes with the top stroke of a T; and it seems to me now that this is also the probable reading of M. Jullian's copy, though he has preferred NA. At the end of the same line I looked in vain for traces of I to make SSЄ into SSIЄ, but I found none, and the verb seems to be *demtisse*, on a level here with *atehotisse*. Of line 12 I could make nothing but

VPЄ, followed by traces of which I could only read an A at a distance, but M Jullian suggests, subject to a triple query, the following reading UZIETIA O . . . PA . . . A.

So far of the reading of Inscription *B*· other questions, however, present themselves, and among the first that of the symbols for the spirant sound of *gh*, which we have here represented by HƷ in ЄHƷΛ, by ZƷ in HЄZƷO, and by a sprawling variant in ONTЄƷATIM and ЄƷOƷIΛ the reading of POZЄΛ in line 6 is too uncertain and the origin of the word too obscure to be of any help One seems safe in drawing the inference that the author of this inscription felt it to be desirable to distinguish the soft spirant sound of *gh* from the stopped sound of *g*, but he hesitated at first between HƷ and ZƷ, and at last made up his mind for the modified form of G which is here represented by Ʒ, and to use that alone without the aid of H or Z If we may treat this as the case, we see at once the extent of the error which I ascribed to him in my previous paper. There was no pause, or hardly any, between TЄ and ЄZƷO, so *h* was admitted in the hiatus, making the words in pronunciation into TЄ HЄZƷO, whereas IMO was not so closely taken with ЄHƷΛ, and therefore there was no occasion for a hiatus aspirate. He only made one slip—he wrote ЄHZΛ ΛTΛNTO for what should have been ЄHƷO ΛTΛNTO. In the next place *demtisse*, while parallel to *atehotisse*, differs from the *demtissie* of Inscription *A*. It was a difference of spelling which had perhaps to do with a sound like that of English *sh*—possibly there were two pronunciations, one with *ss* and one with *sh* This completes the certainty that the same man did not write the two inscriptions.

It is not improbable that *ata demtisse* is to be treated as a subordinate clause in the affirmative and corresponding to *na demtissie* in the negative. In that case *ata* may have had the force of Latin *ut*, and be in some way related to the *ate* of *ate-hotisse*. At all events we should have to distinguish both *ate* and *ata* from the prefix *eti* in *eti-heiont* in Inscription *A*.

Both in the Calendar and in the Defixiones I have kept as closely to the text as it was found convenient. A revision of the conjectures in my last paper concerning these documents would take up too much of the space at my disposal, not to mention that it would most likely prove premature; for it is only now that those conjectures are beginning to be discussed. When Celtic scholars have given their opinions, I expect to find some positions to defend, and some, doubtless, to relinquish.

POSTSCRIPT

'Reste a savoir si nous dirons CELTE ou LIGURE c'est l'éternelle question' So ends one of M. Camille Jullian's 'Notes gallo-romaines' in the July number of the *Revue des Études Anciennes*, and the interest which he feels in that question makes him return to it every now and then. That is not all, for since the foregoing paper was written and presented to the Academy, I have read his contribution to the volume of *Mélanges* recently dedicated to M. d'Arbois de Jubainville on his seventy-eighth birthday. It is entitled 'Les Salyens Celto-ligures,' and it goes, I think, some way to solve the Celto-ligurian question. He lays it down that in the century following the foundation of Marseilles the native peoples of Provence were Ligurians, and that the Ligurian tribe of the Salyes or Saluvii possessed the town of Arles, and had the command of both banks of the Rhone. Now the territory held by the Salyes on both sides of the Rhone, together with that of kindred Ligurian tribes up to the latitude of Orange, let us say, would include easily the localities already mentioned as signalized by the βρατουδε-καντενα group of inscriptions (pp. 349-53). The conclusion is, therefore, hard to avoid that it was the Ligurians of a later age, but still pagan, who set up those inscriptions. Add to this that the *carnitu* inscriptions, which by their provenance seem to be inseparably connected, indicate, as has been suggested at p 353 above, that the same language extended across the Alps far into North Italy. In other words this means that what I have called Celtican was practically one and the same language as that which M. d'Arbois de Jubainville calls Ligurian. In fact, I may say that ever since that distinguished scholar wrote to show that Ligurian must have been an Aryan tongue, I have had the idea present to my mind that this was the Continental idiom akin to Goidelic, as Gaulish was to Brythonic. So to me it becomes more and more a question of names, whether it is to be called Celtic or Ligurian. I received a month or two ago a letter from one of the most brilliant of living Frenchmen suggesting that the proper name for the Celtic family is Ligurian; and he based his opinion on a passage of Lucan's, which he quoted. That is, however, not the usual attitude of those who are attached to the term Ligurian: they seem inclined to treat it as a terminus or as a symbol standing for an unknown quantity, but most of them are little concerned to try to work out the equation which should give us approximately the philological value of their X. There is, however,

one other great exception, and that is, again, Camille Jullian, who writes to me as follows 'Que d'ailleurs cette langue ligure ne fût point trop différente de celle des Celtes, je le crois,' and then he proceeds to indicate his reasons for that conclusion by referring to Varro, Strabo, and Livy. In other words, his careful reading of ancient authorities lead him to a conclusion practically identical with that which I draw from studying the Coligny Calendar and the Rom Defixiones. It is this whatever you call the language of those documents, the key to it has proved to be Goidelic Some of my critics would say not Goidelic but Brythonic even so the key remains Celtic. The same conclusion follows from M. Jullian's examination of such a name as that of the Ligurian tribe of the Segobrigii. He is probably right in treating it as Ligurian, but no glottologist whose attention had not been drawn to Ligurian would have dreamt of its being anything but Celtic. It is a compound that reminds one of the personal name Netta-Segamonos, which occurs no less than three times in the Ogam inscriptions of the Goidelic tribe of the Déssi of Co. Waterford. It seems to have meant the 'Champion of Segamo,' that is of the Mars Segomo, whose cult, as shown by Holder, extended from Lyons to the Côte-d'Or and from Nice to the Jura.

ADDITIONS AND CORRECTIONS.

P. 279. To the kindness of Com. Espérandieu, who is conducting the excavations proceeding at Alise, I owe what seems another instance of *etic*. The reading of the first letter is not quite so certain in this instance as that the word in it means 'and' It comes between two datives closing a recently discovered inscription there, which ends thus:—

ΒΙΡΑΚΟΤѠ ЄΤΙΚ ΟΒΡΙΤΟΥΑѠ.

P. 284. Instead of treating *hoedl* as related to *-sēdlon*, I should probably have equated them; for the former was at one time *hoedl*, as stated by Dr. Davies, s. v., and as proved by such an inscription as that of Gwnnws ending with '*Hiroidil* filius Carotinn,' Hubner, 122, and by such names in 'The Book of Llan Dâv' as *Guorhoidil*, p. 189, and *Rihedl*, *Rihoithil*, or *Rioidyl*, pp 149, 152, 155, 156. Add to this that Casnodyn, a poet who lived early in the fourteenth century, makes *hoedyl* alliterate with *hedwch*, that is *hedwch*. see J. Morris Jones's Welsh Grammar, § 189, vi. He suggests that the fact of *hoedl* being feminine is owing mainly to the influence of its feminine synonym *oes*, 'a lifetime, or generation.'

P 313. I forgot to point out that the Collias inscription (No. xxiv) appears to be in metre compare the one at Alise, p. 281 above. The former seems to scan as follows —

Ἔλιννος | Ρίουμανιος | Ἄνδουννα | βό δεδε | βρατούδε | καντεν.

The same treatment may have applied to Nos. xvi[a], xxii, and xxiv[b], but they are too imperfect to be pronounced upon With No. vii it is different, for there one would only have to correct KANTЄM into KANTЄN, rather than KANTЄNA, and treat TAPANOOY as Τάρανοου. In any case the remark on p 290 as to the accentuation of that vocable is to be cancelled as probably inapplicable to Celtican forms.

P. 341. Since the conjectures on pp. 339-41 were printed, it has occurred to me that *obal* equates with the Irish *ubhall*, 'an apple,' in medieval spelling *uball* or *ubull*, formerly neuter; but this yields no satisfactory meaning unless we assume, that, besides the sense of 'apple,' the word had that of 'offspring or child, καρπὸς τῆς ὀσφύος (Acts ii. 30).' That we may do so becomes a certainty when the fact is recalled, that POMMIO, a word of the same origin, doubtless, as the Latin *pomum*, 'apple,' occurs in the sense of 'offspring or son' in one of the Rom Defixiones · see *Celtae*, pp. 111, 112. In the light of this comparison *obal* may be treated as a neuter singular: compare καντεν, plural καντενα (p. 312 above), and as to Irish *ll*, the names *Conall*, in Welsh *Cynwal*, from CVNOVALOS, and *Domnall*, in Welsh *Dyfnwal*. The O. Welsh for 'apple' was *abal*, now *afal*, while *aball*, later *afall*, was 'an apple tree,' whence *aballenn*, now *afallen*, the actual word for that tree. The O Irish for the same appears to have also been written *aball*, '*haec malus*' (*Gram Celtica*, p 769[a]), which survives in *abhall-ghort*, 'an orchard,' Sc. Gaelic *abhallghart*; but *abhall-* seems to be ousted by *ubhall-*, 'apple,' except perhaps in Munster where the word for orchard is pronounced *abhlórd*. see Dinneen's Irish Dictionary. The Irish *aball* looks like a loan from Welsh, where *aball* admits of an easy explanation as a feminine formation derived from *abal-i̯a*. Needless to say, this leaves unreduced the difference between Welsh *abal* and *obal* or *uball*, 'apple.'

SUMMARY

ARTEMIS EPHESIA

By D G HOGARTH

Fellow of the Academy

Read October 31, 1906

THE site of the great Temple of Artemis at Ephesus was re-examined at the cost of the British Museum during 1904 and 1905 The excavation resulted in the first place in the recovery not only of a complete ground-plan of the temple of the sixth century B.C., discovered below the Hellenistic stratum by Wood in 1870, and of much fresh evidence of its architectural character, but also of many small objects dedicated in that temple, among which are several cult-figurines of the Goddess. In the second place, the excavation revealed remains of three distinct temples of the period before Croesus, which had not been found by Wood. These were all of much smaller area than the sixth century and Hellenistic temples, and the most primitive appeared to be a *naos* just large enough to contain a statue with an altar facing it, the whole enclosed in an open *témenos*. The foundation for this shrine lies at the intersection of the *axes* of all the successive temples alike, and it is evident that at all periods it was the central Holy of Holies, where stood the cultus-statue. When this central structure came to be examined, it was found to be a platform made solid with a filling of flat slabs, between and among which had been packed a quantity of small objects in gold, electrum, silver, bronze, ivory, amber, and other materials, including certain very early electrum coins. The whole number of objects was nearly one thousand, and from their position and the fact that they are almost all objects of personal adornment and evidently selected, they can only be supposed to have been placed intentionally where found, for the use of the Goddess, whose statue stood above, and at the epoch of the first foundation of her small shrine. They appear to belong to the latter part of the eighth and to the earlier part of the seventh centuries B. C. Outside this *naos* foundation, and in the lowest stratum all over the area of the earlier *témenos*, other objects of similar period were also found to the number

of about two thousand. These include fine statuettes and other objects in ivory, crystal, and metals, &c., and many more coins, but little or no personal jewellery.

This unique treasure includes many representations of the Goddess and her attributes, and many objects used in her cult But attention is directed to-day especially to the first category, which will be considered in connexion also with the cult-figurines found in the 'Croesus' temple. These representations, nearly fifty in all, show how the Goddess was locally personified over a period ranging from the eighth to the fourth century B. C. There are several varieties of type, but it is noteworthy that in no case is there any approximation to the 'multimammia' figure rendered familiar by statuettes of the Roman period, and supposed to be preserved also by a well-known type of cultus-image portrayed on Ephesian and other Asiatic city coins from the second century B. C. to the third century A. D. This latter type, however, is probably not 'multimammia' at all, and there is some reason to doubt if it really represents any Ephesian statue It seems possible that it is a traditional cultus-type, not local but probably of Phrygian or Cappadocian origin, introduced into Ephesus, and showing degraded survivals of features of the winged Goddess type, the so-called *πότνια θηρῶν*. The local Ionian personification, so far as the available evidence goes, seems to have been originally of genuine Hellenic character, a natural matronly figure. The confusion of Artemis Ephesia with the great West Asian Goddess of the non-Hellenic peoples is argued to have happened late in time, and to have been symptomatic of a change in the character of Ephesian civilization, which gradually became more Asiatic, and adopted a conception of the goddess-cult reflected in the early history of Ephesian Christianity, and still to be discerned locally at the present day.

PETRUS PEREGRINUS DE MARICOURT AND HIS EPISTOLA DE MAGNETE

By SILVANUS P. THOMPSON, F.R.S.

Read November 28, 1906

Let us travel back to the year 1269 A.D., King Henry III on the throne of England and Charles of Anjou but recently crowned King of the two Sicilies by Pope Urban IV; the Crusades still a living movement, Friar Roger Bacon writing crude science, or what passed for such in his time, in his retirement in Paris, Oxford having proved too orthodox for him. Over all such inquiries and speculations, whether relating to chemistry, optics, or any other occult science, the bigotry of the Middle Ages—bigotry scholastic as much as ecclesiastical—hung like a pall. The new spirit, which from two to three centuries later revived classical learning, discovered a new continent, and invented printing, was not yet born. Such was the time.

Let us travel southwards into Italy, to the promontory of Apulia, which, with Sicily, had three centuries before been overrun by those Saracen invaders who have left their mark in so many ways upon its history. Closely bound up with them is the little town of Lucera (the Luceria of the Samnite war), where the Emperor Frederick II had built himself a stronghold, and where he had ordained a free asylum for the Saracen outcasts of Southern Italy. In 1266 Charles of Anjou captured the town of Lucera, only to find it rebelling against his authority so soon as his back was turned. A second time he laid siege to it, but it offered an obstinate resistance, and was finally subdued only by sheer starvation.

Amongst the besieging host serving in the trenches before Lucera in the year 1269 was one Master Peter, or Pierre de Maricourt, better known as Petrus Peregrinus, Peter the Pilgrim. A famous man already, as we shall see, and learned, a man of substance, from Picardy. Doubtless he received his cognomen of the Pilgrim from some earlier military service in the Holy Land, for the title was usually accorded to those who returned from the Crusades. His

master, Charles of Anjou, in whose service he had come to the investment of Luceria, had joined the first Crusade of his brother Louis IX of France Probably Peter had served with him there.

Of Master Peter we get a glimpse in the writings of Roger Bacon, and something more than a glimpse of the influences that set Master Peter to work on the treatise which has made him immortal For Bacon, while he learned some things from Peregrinus, probably himself shared with him a portion of his own learning, and found him a man of splendid parts About 1260, while Bacon was still at Oxford, he had taught freely such occult learning about the magnet as he himself had been able by reading and experiment to acquire. It is of magnetism that Peter subsequently wrote therefore a momentary glance at Friar Bacon's teaching on the magnet is appropriate Bacon's *Opus Majus*, a sort of encyclopaedia of philosophical studies, ranging from music to philology, from geography and chronology to grammar and arithmetic, contains a brief statement about the lodestone. Iron which has been touched by a lodestone follows that part of the stone by which it has been touched, and flies from the other part. It also turns toward that part of the heavens to which that part of the stone with which it was touched conforms. He combats the received opinion that it is the Pole star which influences the magnet to turn northward, for, were this the cause, the magnetized piece of iron would turn always toward the star. But this is not so, for the rubbed piece of iron will follow with its movements in any direction the part of the lodestone wherewith it was rubbed And, he adds, if the iron be set to float in a vessel of water and the lodestone be placed beneath it, the same part of the iron will turn downward to meet the stone, or will turn upward to meet it if the stone be held above. If, on the other hand, the other part of the stone be presented to the iron, the iron will fly from the stone like the lamb from the wolf.

From this we may gather what was the knowledge, at that date, of the properties of the magnet. It is obvious that the natural tendency to point northward—the precious property utilized in the mariner's compass—was known, as, indeed, other contemporary evidence shows. It is clear also that, whether it was generally known or not, it was at least known to Bacon that there is a magnetic repulsion between like poles, as well as a magnetic attraction between unlike poles. When Brunetto Latini visited him in Oxford, Friar Bacon showed him—as he records—the ugly black stone to which iron joins itself of its own will; showed him also the piece of iron, which, when rubbed on the stone, will turn northward. And Brunetto himself a few years later

—he died in 1294—wrote about the compass guiding the mariners, in his work *Li Livres dou Tresor*. That the learning of Brunetto Latini left its mark on his great pupil Dante is acknowledged. Perhaps it was from Brunetto that Dante learned of the pointing of the magnetic needle toward the pole star —

> Del cor dell' una delle luci nuove
> Si mosse voce, che l'ago alla stella
> Parer mi fece in volgermi al suo dove [1]
>
> *Paradiso*, xii, 28–30

Now in the *Opus Tertium*, one of the works which Roger Bacon, when condemned by the Superior of his Order (the Franciscans), wrote out for Pope Clement IV, he tells the Pope that there are but two perfect mathematicians, to wit, Master John of London and Master Peter of Maricourt, a Picard. Master John, his own trusted pupil, whom he chose in 1267 to convey his completed treatises to the Pope,[2] can hardly be other than John Peckham, afterwards Archbishop of Canterbury, author of the *Perspectiva Communis*. Master Peter, to whom he gives the full title of Magister Petrus de Maharne-Curia, is Peter Peregrinus. The title 'Magister' was accorded to him doubtless because he had won the degree of Doctor at the University. De Maharne-Curia is his territorial title as a French nobleman, being the name of a little village, Maricourt, in Picardy

Of Master Peter, Roger Bacon spoke more than once. In the thirteenth chapter of the *Opus Tertium* (see p. 46 of Brewer's edition of 1859), speaking of some optical experiments, he adds 'which none of the Latins can understand save one, to wit, Master Peter; and it is so also in other matters of natural study' Master Peter appears to have been a follower of Archimedes in more than one direction for Bacon says that he had worked for three years upon constructing a burning mirror, and that 'by the grace of God he will soon come to an end of it, which none of the Latins knew how to do, nor was such ever attempted by them, though we have books on the construction of this kind of mirror.' In Bacon's *Opus Minus* (chap xxxii), recurring to the subject of this same burning-mirror, Bacon says: 'It was made with great expense and labour, for its constructor had to pay a hundred Parisian pounds, and worked for several years, setting

[1] Out of the heart of one of the new lights
There came a voice, that needle to the star
Made me appear in turning thitherward
(Longfellow's translation)

[2] There is some doubt about the identity of the Master John who thus carried Bacon's treatises with John Peckham, Master John of London.

aside studies and other necessary occupations. Yet not for a thousand marks would he have neglected the work, and it is wonderful that he should have dared to embark upon such an unknown and arduous business But he is most knowing, and nothing is difficult to him unless because of want of means.' But in the *Opus Tertium* (chap xiii, p 46) Bacon lavished upon Master Peter praises much more extravagant. Still dwelling on the properties of mirrors, he says 'For I know one only'—and here the Bodleian manuscript has a marginal note to explain that Bacon is still speaking of Master Peter of Maricourt—'who can have praise for works of this science, for he does not trouble about discourses or quarrels over words (non curat de sermonibus et pugnis verborum), but follows the works of wisdom and keeps quietly to them. And so, though others strive blinkingly to see, as a bat in the twilight, the light of the sun, he himself contemplates it in its full splendour, on account of which he is a master of experiment (magister experimentorum) and therefore he knows by experiment natural history, and physic, and alchemy, and all things in the heavens and beneath them indeed, he is shamed if any layman, or grandam, or soldier, or country bumpkin knows anything that he himself does not know Wherefore he has inquired into all operations of metal-founding, and the working of gold and silver and other metals, and of all minerals; and he knows all things pertaining to the army and to arms and the chase · and he has examined all that relates to agriculture, the measurement of land, and earthworks, and he has even studied the experiments, devices, and incantations of witches and magicians, and likewise the illusions and tricks of all jugglers; so that nothing is hidden from him which he ought to know, and he knows how to reprobate all things false and magical. And so it is impossible without him that philosophy should be exhausted, or be treated usefully and with certainty. But he is thus not worthy of price, nor does he estimate his own worth. For should he wish to stand well with kings and princes, he would find those who would honour him and would enrich him. Or, if he were to show in Paris by his works of wisdom all that he knows, the whole world would follow him yet because either way he would be hindered from the bulk of his experiments in which he most delights, so he neglects all honour and enrichment, the more since he might, whenever he wished it, attain to riches by his wisdom'

This, then, was the man who had followed Charles of Anjou to the trenches at Lucera, probably busied there in devising fortifications and machines for the siege, applying, like Archimedes, his mechanical genius to the purposes of warfare.

The friend to whom, on the eighth day of August, 1269, he wrote his famous Epistle on the Magnet, Sigerus, was, like Peregrinus himself, a soldier and a landed proprietor in Picardy. The manuscripts describe him variously as of Foucaucourt, Fontancort, Foucancort, and even Feucicort. The name of Faucaucort is to be found, like that of Maricourt, amongst the villages in the Department of the Somme. And, according to Libri, the names of Petrus Peregrinus and of Sigerus both occur in contemporary chronicles, that of Peregrinus being met with more than once in the book *Dei Gesta per Francos*, in which is found a list of 'princes, prelates, and soldiers' who were present at the wars in the East. Perhaps Sigerus of Fauconcourt was the same man as the Siger mentioned by Renan[1] along with Géraud of Abbeville, who in 1271 presented to the University of Paris a gift of manuscript books, amongst them treatises on natural philosophy by Arabic writers. It was this Siger who wrote a treatise *De Anima intellectiva*, and who was by Dante himself assigned a place in Paradise beside those two stout mediaeval philosophers, S. Thomas Aquinas and S. Albert of Ratisbon, and in company with S. Isidore and the Venerable Bede. The verse runs —

> Essa è la luce eterna di Sigieri
> Che leggendo nel Vico degli Strami
> Sillogizzò invidiosi veri.[2]
>
> *Paradiso*, x, 136–8

However these things be, it is clear that both in Peregrinus and in Sigerus we are not dealing with mythical personages, but with men of flesh and blood, and notable in their age.

To turn to the Epistle on the Magnet. Of this there are now known to be at least twenty-eight different ancient manuscript copies, written between the end of the thirteenth and the end of the sixteenth centuries. A complete list of them is given in Appendix A. Most of them have now been examined and collated Of the twenty-eight MSS, twenty-six are in public libraries or University collections, the remaining two—namely Codex B and Codex T—being in the writer's possession. All are in Latin save three, namely two Italian versions in the library of the University of Vienna, and a late English version in the library of Caius College, Cambridge Twelve of the twenty-eight MSS. are in the United Kingdom, viz seven in Oxford,

[1] Renan, *Averroès et Averroisme*, p 272. Renan refers to a biography of Siger by Victor Le Clerc in the *Histoire Littéraire de la France*, xxi, p. 96.

[2] It is the light eternal of Sigier
Who reading lectures in the Street of Straw
Did syllogize invidious verities
(Longfellow's Translation.)

one in Cambridge, one in the British Museum, one in Dublin, and two in the writer's possession. Of these last, Codex B, a small Italian vellum palimpsest, was formerly in the library of Prince Boncompagni, the other, Codex T, was in the collection of Sir Thomas Phillipps The twenty-eight MSS. are of very unequal values, and no two have yet been found to agree precisely in their text. The oldest of them is probably one of those in the Vatican (Codex V_3), and it is possibly contemporary with Peregrinus himself, being inscribed with great beauty on parchment. It was apparently written for the Queen of Sweden,[1] as it is inscribed *Regina Svecorum*, and has at one place a comment in Danish inserted in the margin of the text The oldest of the remaining texts are probably Codices D_1, D_5, and D_7 in the Bodleian Library, Codex P in the Bibliothèque Nationale at Paris, and Codex T mentioned above. Codex D_1 and Codex T are beyond question manuscripts written by English scribes. Possibly the Dublin manuscript, Codex U, should be placed amongst the earliest. The MSS. mostly contain three illustrative diagrams, but in some they are absent, and in nearly all the late texts the diagrams have degenerated at the hands of the copyists into rude and useless forms. The best diagrams are found in Codices V_1, P, and D_7: they agree very exactly with those printed in the Augsburg edition of 1558.

The printed versions of the Epistle of Peregrinus are nine in number, or eleven if we include also the plagiarized work of Joannes Taisnier (1562) and its English translation (1579?) by Richard Eden. A complete bibliographical list is given in Appendix B. Of the nine editions one only is prior to the eighteenth century. This is the excessively rare small quarto tract printed in Augsburg in 1558 at the instance of Achilles P. Gasser, physician, of Lindau, one of the later humanists, a friend of Pirckheimer and an acquaintance of Luther and Melanchthon, and who added to this version a lengthy introduction of his own, with a bibliography of works that deal with magnetism. This book, which is so scarce that the late Mr. Bernard Quaritch had never come upon a single copy in forty years, is even more rare than the manuscript versions, for there are only eighteen copies of it known to exist, and of these all are in public libraries, save one, viz. that in the possession of the writer. A list is given in Appendix C. The MS. from which Gasser printed this Augsburg edition is not now known[2] to be in existence. Gasser was unaware

[1] Queen Christina, who left her library to the Vatican

[2] I hazard the conjecture that he used the fourth of the copies in the collection of Amplonius Ratinck, of which three remain in the University of Erfurt, see p. 403, below.

of the date or place of origin of the Epistle, and says that he does not know who Peregrinus was, but supposes him to have lived three hundred years before—therefore in 1258. Now the date, August 8, 1269, and the place, the camp before Lucera, we know from three important MSS, viz. Codices L, V_2, and V_3, the first of them in Leyden, the last two in the Vatican; but of these Gasser was unaware. The Leyden MS., which has become celebrated because of a passage in it, now known to be a spurious addition, mentioning the declination of the compass from the true North (a discovery usually attributed to Columbus or to Cabot), was mentioned by Thévenot in 1681 in his *Recueil de Voyages* [1], was subsequently purchased by Vossius, and passed with the rest of the Vossius collection to the University of Leyden.

In 1798 this Leyden MS., Codex L, was discovered by the electrician, Tiberius Cavallo, F.R S, who translated a portion of it, printing the excerpts, in Latin and English, as a supplement to the third edition [2] of his *Treatise on Magnetism.*

The historian Libri, in his work, *Histoire des Sciences Mathématiques en Italie*, Paris, 1836, Tome ii, p 70, gives an account of the Epistle, and adds in an appendix, pp. 487–503, a very imperfect rescript of the Latin text of Codex P, with a translation into French.

In 1868 the late Father Timoteo Bertelli, Barnabite, the founder of Italian seismology, published in Boncompagni's *Bullettino di Bibliografia*, Vol I, an elaborate research on the various texts of Peregrinus, as known to him, followed by a revised Latin version based on Codex B, together with a collation of seven other originals. In 1871 he further published (*Bullettino*, Vol. IV) a number of variant readings from two other manuscripts in the Vatican

In 1897 Professor G. Hellmann, of Berlin, published in his *Rara Magnetica* another Latin version, in which he embodied some of Bertelli's later readings.

There are, therefore, five printed Latin versions, not including the plagiarized tract of Taisnier nor the facsimile manuscript printed in 1900 by Quaritch, mentioned on p 407, below.

The present writer, having had occasion at various times during nearly thirty years to inquire into the early history of magnetism,

[1] Paris, 1681, pp 29, 30 'On a cru jusques à cette heure, que la déclinaison de l'Ayman n'a commencé d'estre observee que vers le commencement du dernier siècle. Cependant j'ay trouvé qu'elle varioit de 5 degrez l'an 1269, c'est dans un manuscrit qui m'est tombé entre les mains, avec ce titre, *Epistola Petri Adsigerii, in super rationibus naturae Magnetis, etc.*'

[2] *Tiberius Cavallo* A Treatise on Magnetism, &c. The Third Edition, with a Supplement. London, 1800

has been led to examine many of these original sources. In 1902 he had privately printed at the Chiswick Press an English translation, made from the versions of Gasser, Bertelli, and Hellmann, with certain amendments drawn from Codex T or from Codices D_1, D_2, and D_3. Since then he has collated with the printed versions the texts of the Oxford Codices D_4, D_5, D_6, D_7, and of Codex M (the Egerton MS in the British Museum). Some of the results of this comparison are shortly enumerated below.

Some of the MSS. begin with the introductory phrase, *Incipit tractatus magnetis*, or similar expression. Some of them begin with a personal exordium to Sigerus, which opens with the words *Amicorum intime*, and states the scope of the work. Others of the MSS. begin differently, setting out a list of contents of the different sections of the work with the words *Iste tractatus duas partes continet, quarum prima decem capitulis completur, et tribus secunda*, &c. The Paris MS. opens with the list of contents, followed by the prologue *Amicorum intime*, this order is followed by Gasser, Bertelli, and Hellmann. On the other hand, the Leyden MS., which opens *Incipit prologus*, continues *Amicorum intime*, &c., and introduces the list of contents in the middle of the prologue. Codex T follows the same order, as likewise does V_4. This difference in position suggests that the list of contents is not truly a part of the original epistle, but has been added by a subsequent scribe. Some copies do not contain either the list or the prologue. For example, Codex D_3 and Codex M, both of which are late fourteenth century, begin without any title, with a sentence which appears to be this: *Inter omnes res inferiores lapis qui dicitur magnes in se gerit similitudinem cœli ut tibi inferius docebo.*

It will be convenient here to give the introductory prologue, and to follow it by a brief analysis of the scientific contents of the Epistle:—

'Inmost of friends: being solicited by you, I will disclose to you in rude narration a certain occult nature of the magnet stone. For nothing indeed is pleasurable to philosophers apart from the sharing of the knowledge of it: because the nature of good things wanders, and is obscured in darkness until it is brought up into the radiance of public recognition.' [Here in some texts is inserted the list of Chapters.] 'For love of you, therefore, I will write down in plain language things which to the bulk of students are utterly unknown. Nevertheless we shall not communicate in this epistle any information save about the manifest properties of the stone, on the ground that this teaching will form part of a Tract in which we shall show how to construct physical instruments. To treat of the occult properties of this stone leads us to the art of engraving stones. And although I call those actions manifest concerning which you have inquired, yet they will be of no esteem, and in the eyes of the vulgar will be as illusions and phantasms. And therefore because they are secrets to

the common people, but will be manifest to Astrologers and Naturalists, they will also be a solace to them, just as they will likewise be of no slight assistance to travellers who have gone far away'

After this exordium Peregrinus lays down the principles of the experimental method. The investigator must be skilful with his hands, for thus he will be able to correct errors which in a lifetime he could never do by reason or mathematics. Then he tells how to set about to know a good lodestone. it must be dense, free from flaws, and of a bluish colour like polished iron slightly tarnished. He says that such stone is found in Northern regions and brought by sailors into the ports of Normandy, Picardy, and Flanders. The best stone is that which will lift the greatest weight of iron. All this is excellent advice. Incidentally, it is of interest to note the reference to the navigation of the northern seas, which is of significance in the disputed question whether the use of the compass began with the Arab traders in the Levant or with the Northmen in the Baltic. The next chapter relates to matters of wholly different moment. Hitherto no one had attained any clear notion about the polarity of the magnet itself. From Pliny to Roger Bacon it had been known vaguely that parts of the lodestone would attract iron more strongly than other parts, and that under some circumstances iron was apparently repelled. Peregrinus puts this knowledge into definite shape that, in fact, the magnet has two poles as definite as the poles of the sky. 'There are,' he says, 'two points in the heavens more noteworthy than the rest, because the celestial sphere turns about them as upon axes. One of them is called the Arctic or North pole, whilst the remaining one is called the Antarctic or Southern pole. So in this stone there are two points, of which one is called the North, the remaining one the South.' Then he tells how to find them. One way is to have the lodestone rounded like a ball. Then let a needle or a bar of iron be placed over the stone, and then draw a line along the stone in the direction which the needle takes, the line thus dividing the stone along the middle Let this operation be repeated at another place on the surface of the stone. It will be found that all the lines so drawn will without doubt meet in two points, 'just as all the meridian circles of the world meet in the two opposite poles of the world.' He thus discovered the positions of the two poles, and gave a second method of discovery by finding the places where the end of the needle or of the bit of iron adheres most strongly, or will stand upright. These poles he tells you to mark by incisions on the stone One he calls the North pole, the other the South. A new experiment is next suggested. Take a lodestone and

put it into a wooden cup or plate, and set it to float, like a sailor in a boat, upon water in a larger vessel, where it will have room to turn. Then the stone so placed in its boat will turn until the North pole of the stone comes to rest in the direction of the North pole of the heavens, and its South pole toward the South pole of the heavens. And if a thousand times you move the stone away from that position, a thousand times will it return by the will of God. Each part of the stone turns towards the corresponding part of the heavens. Then, as a further experiment, while the stone is floating, you are to observe the effect upon it of the presence of another lodestone. If the north part of the stone, which you hold in your hand, be brought to the south part of the stone floating in its boat, the floating stone will follow the stone you hold, as if it wished to adhere to it. 'Let it be known, therefore, as the rule, that the north part of one stone attracts the south part of another stone, and the south the north.' This is the fundamental law of magnetic polarity. It is true he stated it thus qualitatively only, not quantitatively. He had, however, gone far on the road to knowledge; and but for being misled, as we shall see, by the scholastic doctrine of similitudes, would have been on solid ground. Peregrinus also notes how it is possible under certain conditions to change the polarity of a lodestone by the influence of a still stronger one. He further describes how, when a magnet is cut in two, each portion becomes a complete magnet having north and south poles: and he devotes nearly a whole chapter to the discussion of the right way of putting the fragments together in one line, and in the right order, to the end that they may, as it were, conjoin into one magnet when alligned in their natural sequence.

It has been noted above how Roger Bacon combated the then current opinion that the pointing of the magnet was governed by the North star. The lodestar and the lodestone being the mariner's guides, what wonder that, in an age when the stars and planets were supposed to rule the destinies of men, it should be imagined that the one governed the other? Nor was Peregrinus able to divest himself of this supposed connexion between celestial influences and the magnet. Observing that the magnet points northward, he attributes the directive action not to the poles of the earth, but to the poles of the sky. Not that the idea of the earth having a directive action had never occurred to him. He discusses it, only to dismiss it. Some ignorant folk, he says, have deemed the virtue by which the stone attracts iron to exist in the mines where the magnet is dug up, wherefore they say that the iron is moved toward the poles of the earth because of the mines of stone there existing. This is in allusion

to the supposed lodestone rock situated, as they fancied, at the North pole. Peregrinus maintains, on the contrary, that, as the mines are found at various places all over the earth, the magnet should turn variously to them—and this is not the case. Therefore, he argues, 'wherever one may be, he may see with his own eyes this movement of the stone according to the place of its meridian circle. But all meridian circles meet at the poles, wherefore the poles of the magnet receive their virtue from the poles of the universe.' He even remarks that the pole star varies in its place, showing that he at least knew that it was not situated actually at the axial point of the heavens. And so, led away by his celestial inclinations, he went on to describe a new and unheard-of invention—perhaps the earliest of its kind—a perpetual motion. He had conceived the idea that if the stone respects or is conformed to, or is governed by the poles of the sky, then because the sky turns round on its poles, so would the stone if properly pivoted. Make, he says, a globular magnet, find its poles, and pivot it to turn on them. See that it is well balanced and turns easily. try this many days and at different times of day. Then place the stone with its axis tilted in the manner of an armillary circle (just like our model globes) to correspond to the latitude of the place. And then: 'If the stone move according to the motion of the heavens, you will rejoice in having discovered so wonderful a secret. But if it moves not, impute the failure rather to your own unskilfulness than to any fault in nature.' He says that with this timepiece you will be independent of such devices as sundials and clepsydras. Possibly all this is only an echo of an old tradition that Archimedes constructed a sphere which reproduced the motions of the heavenly bodies—doubtless a mere model. But Peregrinus seems to have had no doubt that the magnet if properly poised would rotate ceaselessly, revolving once a day on its axis, keeping pace with the apparent rotation of the celestial vault. Roger Bacon, in the *Opus Majus*, refers to this device of Peregrinus, and it found mention also in the *De Subtilitate* of Cardan. Gilbert in his *De Magnete* (1600) mentions it, only to pass it by as worthless and improbable.

With this conceit ends the first part of the famous Epistle. But in the second part, which treats of instruments, there is more to come. In three successive chapters he describes three new magnetic instruments. The first was a floating compass, an improvement on the primitive floating compasses that were even then in existence. For these had no line or mark, no points by which to set the helm. The new instrument of Peregrinus is a floating magnet provided with a fiducial line and with a circle divided out with graduations. He

tells how to divide a circle surrounding the bowl first into four quadrants and then each quadrant into ninety degrees. Most of the manuscripts give rude sketches of this, the earliest compass with proper divisions. Fig. 1 is reproduced from the Augsburg edition of 1558. The second instrument is also a compass, this time a pivoted one, provided with top and bottom pivots between which stands an upright axis through which is thrust a magnetized needle, and at right angles to it a transverse index of brass or silver which will lie east and west when the needle itself lies north and south. He describes the use also of a transparent cover, and of

FIG. 1

a fiducial arm provided with a pair of sights with which to make eye observations of external objects, and so take the bearings of the ship. 'By this means,' he says, 'you may direct your course toward cities and islands and all other parts of the world, either on land or at sea, provided you know beforehand the longitudes and latitudes of those places.' Here, then, was a most admirable and wonderful advance in the art. Fig. 2 gives the form as depicted in the Augsburg edition. The accompanying Plate, reproducing folio 186 *verso* of the Bodleian MS., Codex D_7, shows the corresponding diagram in that manuscript, together with the text in which the instrument is described. Incidentally it

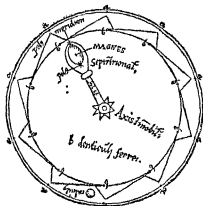
FIG. 2.

may be noted that this pivoted compass of Peregrinus antedates by more than thirty years the date usually given as that of the invention of the mariner's compass by the mythical Flavio Gioia of Amalfi in 1302.

The thud instrument described by Peregrinus is a new wheel of perpetual motion. This was a real paradox. A light circle resembling a large bracelet was to be made of silver, perforated for ornament and to give it greater lightness. Within its periphery were to be fixed a number of inwardly projecting angular teeth of iron, all alike in weight, and it was to be pivoted on a horizontal axis. Within the wheel, mounted upon a fixed arm, an oval lodestone was to project towards the teeth. The wheel was then to revolve for ever, the magnet attracting first one tooth and then another. Alas for the vanity of human wishes, this was as impossible as any other of the million perpetual motion machines with which mankind has since been plagued. Fig. 3 depicts the instrument as portrayed in the Augsburg edition.

Fig 3.

After the perpetual motion wheel the Epistle comes abruptly to an end with these words —'Farewell Done in camp at the siege of Lucera, Anno Domini 1269, the eighth day of August'

What became of Peter the Pilgrim, and whether he ever wrote out—as in the Epistle he says he purposed to do—his treatise on mirrors, history does not record. For nigh three hundred years he was almost completely forgotten, until Gasser printed the Augsburg edition in 1558 In the interval between that date and 1600, when Gilbert published his classical treatise, *De Magnete*, Peregrinus's tract had been plagiarized by Antonio de Fantis, who reproduced the idea of the perpetually revolving sphere, and by Joannes Taisnier, who in 1562 published as his own discoveries the greater part of the work of Peregrinus. In 1681 a casual mention was made of the Epistle to Sigerus by the French traveller, Thévenot [1], who, by a curious blunder in reading, attributed it to a certain Petrus Adsiger, and missed the name Peregrinus. Save, however, for these references, Peregrinus remained utterly forgotten until the Leyden manuscript was unearthed by Cavallo. The personality of Peregrinus was completely lost and obscured. Nevertheless his Epistle remains to all time a notable achievement—the more wonderful because of the age in which it was

[1] See reference, p 383, *ante*

produced, an age when the light of science burned dim, and research was condemned as impious and heretical.

It remains to add a few words as to the manuscripts themselves. Codices E_1, E_2, and E_3 at Erfurt, and Codices A_1, A_2, and A_3 at Vienna have not yet been critically examined. Codex C at Cambridge and Codex Y at Turin are known to be transcribed from the printed Augsburg edition, and therefore are of little service for recovering a pure text. Codex R at Florence is late and defective, as is Codex D_5 of those at Oxford. Codex D_2 at Oxford, though of the fifteenth century, is defective, containing only the latter half of the Epistle. Two of the manuscripts, namely D_3 at Oxford and Codex M in the British Museum, are different from the rest in omitting Chapters I and II, and begin only at Chapter III, prefaced by the sentence mentioned above on p. 384.

To identify the various passages, reference is made to the pages and lines as they stand in Bertelli's printed text in the *Bullettino di Bibliografia*, Tom. I. To add to completeness, some references to the readings of the Vatican MSS., examined by Bertelli (*ib.* Tom. IV), have been included.

PART I. CHAPTER I

P 71, line 4. *Amicorum intime.* This is the reading of B, D_1, D_4, D_5, D_7, and T. *charissime* G and Pf *optime* V_2 and R.

P. 71, line 4. *virtutem.* *naturam* G, V_1, V_2, V_3, V_4, R, D_1, D_4, D_7, and T.

P 71, line 6. *absque*; also in G and D_7. *sine* D_4 and T.

P 71, line 6. *est iucundum*, also G and D_4. *esse iocundum* D_4 and T.

P 71, line 7. *in communem deditionis.* *in communem deductionis* V_2, D_4 and T *in communis dedicationis* G and Pf. *in communis deductionis* D_7. *in contrarie deditione in communis conditione* D_1.

P 71, line 7 *radium erigatur*, also D_7. *radium eligatur* G *radium erogatur* D_1 and D_5. *radium irradiatur* D_4. *regulam deducatur* T

CHAPTER II

P. 71, line 18 *Qualiter debet* *Qualis debeat* B, G, V_2, V_4, L, D_1, and D_7. *Qualis debet* T.

P. 72, line 1. *nec inscium ipsum esse opportet*; also D_7 *ignarum* G, Pf, V_2, V_3, V_4, L, D_1.

P 72, line 4. *per naturalem et mathematicam solas non faceret*; also D_5 and D_7 *per naturalem et mathematicam scientiam non faceret* D_4 and T. *per naturam Mathematicus alias non faceret* G. *per naturalem et mathematicam solus non faceret* D_1. (In this MS the *solus* has been deliberately inserted by the scribe, with a caret, after writing *mathematicam non*)

CHAPTER III

P. 72, line 15. *affertur.* *adfertur* G. *et fertur* T *aufferuntur* D_1. *afferuntur* D_7.

P 72, line 16. *omnibus partibus maris*, also G and D_5 *omnibus portibus maris* D_4, D_7, and T. *omnibus portubus maris* P, V_2, L.

P 72, line 16 *Normannie, Flandrie*, also D_7. *Normannie, Picardie et Flandrie*, G, V_2, V_3, V_4, L, D_1, D_4, D_5, and T.

P. 73, line 1. *efficitur ponderosus ponderosior existit in pretio* This sentence varies in most of the manuscripts, and in two of them a completely different reading is substituted in place of the above and the next following sentence. In D_3 the reading is :—*Quanto ponderosior tanto pretiosior est Et quanto plus,* &c. And in M :—*Quanto ponderosior est tanto preciosior est.* *ponderosior est preciosior existit in pretio* D_4. For *ponderosior,* the following read *pretiosior*: G, V_2, V_3, V_4, P, L, D_1, T.

P. 73, line 3. *Quando ergo.* *Si ergo* G, D_1, D_4, D_7, T.

CHAPTER IV

P. 74, line 2. *et gradibus.* *vel situbus* G, Pf, V_1, V_2, V_3, V_4, L, D_1, D_4, D_5, D_7. *et ortubus* D_3 *et ortibus* M.

CHAPTER V

P. 75, line 9. *in nutu Dei.* *nutu Dei* B, V_1, V_2, V_3, V_4, L, P, D_4, D_5, D_7. *instinctu Naturæ* G. The phrase is entirely omitted in D_1, D_3, and M.

CHAPTER VI

P. 76, line 15. After the words *ad meridionalem,* there are added in T these words :—*idem faciat sicut dictum est supra de parte septemtrionali ad septemtrionalem. Et sciendum est quod sicut septemtrionalis appetit meridionalem ita meridionalis appetit septemtrionalem* Then follows *Ex hoc evacuatur,* &c. In D_4 there is a similar passage, which, however, begins *cum enim faciat sicut,* and omits the words *sciendum est quod.*

P. 76, line 17. *attrahat.* *attrahit* G *attraheret* D_7. *attrahet* T.

CHAPTER VII

P. 77, line 3. *Et notum*; also in D_1, D_5, D_7 *Ut notum* G *Verum notum* T. *Unde notum* D_4. Omitted in M.

P 77, line 4. *imponetur*, also in D_1 and D_7. *expositum* G, V_4, L, T. *exponitur* Pf, V_3. *impositum* D_4. *appositum* D_5. *exponetur* M

P. 77, line 5. *ad stellam quam nauticam vocant*; also in D_1, D_7. *ad stellam dictam nauticam* G *ad stellam quam nauticam dicimus* D_4, T *ad stellam que nautica vocatur* D_5 *ad stellam nauticam* M

P 77, line 7. *afferimus*, also in D_1, D_7, P. *affirmamus* T *afferimemus* D_4.

P 77, line 9 *que meridionalem partem lapidis tetigerit* *quam meridionale latus lapidis tetigerit* G. *quam tetigerit meridionalem lapidis* D_3 *quam tetigerit meridionalis* D_4 *quam meridionalis lapidis tetigerit* D_1, D_7, P *que tetigerit meridionalis lapidis* T

P 77, line 11 *vertetur*, also D_1, D_3, D_4, D_5, T *volvetur* G, D_7

CHAPTER VIII

P 78, line 4 *approximes*; also in D_1, D_5, D_7 *approximaveris* D_4, M, T. *porrexeris* G.

CHAPTER IX

P 78, line 16 *agens intendit*, also in P *agens enim intendit* G, Pf, V_2, V_3, V_4, L, D_1, D_4, T. In D_7 there is a copyist's omission, the passage reading *debilioris vero patiens non solum*, &c

P 78, line 17 *sibi assimilare sed unire*; also in D_7, P. *sibi assimilare sed etiam unire*, D_4, T *assimilare sed unire* D_1. *adscissere sed etiam unire* G

P 78, line 18. *per numerum* *per naturam* G, V_2, V_3, V_4, Pf, L, D_1, D_4, D_5, D_7 *secundum naturam* T

P. 78, line 18. *Et hoc potest*; also G, P *Et potes hoc* D_1, D_4, T. *et hoc potes* V_4, L, D_7

P. 79, line 1. *fingas*; also in G, D_1, D_5, D_7, P *scindas* D_3, D_4, T

P 79, line 5. *sit unigeneus*; also D_7, P *lapis sit unigeneus* G, V_2, V_3, V_4, L, D_1, D_4, D_5, M, T

P. 79, line 15. *eadem oppositiones quas primo exercebant.* *easdem operationes quas prius exercebit* G. *eadem operationes quas primo exercebit* D_1 *easdem operationes quas primo exercebit* D_4. *eandem operacionem quam primo exercebit* D_7 *easdem operationes quas primo exercebunt* T.

P. 80, line 6 *septemtrionale est in tota linea*; also in G, D_4, D_5, D_7 *septemtrionalis est in linea unita* T *septemtrionale in tota linea* D_1

P 81, line 3 *requirit* *requiritur* G, B, D_1, D_4, D_5, D_7, P, T.

P. 81, line 8. *in eadem specie et virtute* *in eadem specie cum agente* G, V_2, V_3, V_4, D_1, D_4, D_5, T. *in eadem specie agente* V_1, D_7.

P 81, line 11. *eligit primum ordinem actionis*, and also D_1, D_5, D_7, P. *eligit primum modum et ordinem actionis* G. *eligit primum ordinem actionis vel racionis* D_4. *eligit primo vel primi ordinem actionis vel rationis* T.

P 81, line 13. *quare pars meridionalis* *quare meridionalis* G, D_4, D_5, D_7. *qualiter pars meridionalis* P. *quod meridionalis* T *qualiter meridionalis* D_1

CHAPTER X

P. 82, line 5. *fit in*, also in B, V_1 *sit in* G, V_3, P, D_7. *sit a* V_2, V_4, D_1, D_4, D_5, T. *fit a* L.

P 82, line 11 *quare ab illis locis ad nos posse portari magnetem fatuum est estimare*; and also D_7, P Also in D_4 and D_5, omitting the word *mag-*

netem. In D_1 the word *posse* is omitted   *quare ab illis locis ad nos portari non posset, et ideo fatuum est sic estimare* T

P. 82, line 14 *verum etiam meridionali virtutem influi*, also in D_1 *verum etiam a parte meridionali virtutem influi* G.   *verum etiam a meridionali influi* V_3, P   *verum etiam a parte meridionali virtutem ferri influi* D_4 *verum etiam meridionali influi* D_7 *verum in aperte meridionali virtutem influi* T

P 82, line 15. In D_5, after the words *secundum suum situm orbis meridiani* (which come at the bottom of fol 82, *verso*) there is inserted a nearly contemporary footnote as follows:—*Miraculum nature in parte notum, scilicet quod ferrum sequit partem magnetis que contegit ipsum et fugit partem alteram eiusdem magnetis et convertit se post motum ad partem celi conformem parti magnetis que ferrum tetigit. Sic homo expertus ad quam partem celi quelibet pars magnetis tendat Et tunc si a parte septentrionali magnetis tangatur ferrum, sequitur illam partem qualitercunque moveatur, scilicet sursum, deorsum, ante, retro, dextrorsum, sinistrorsum, et secundum omnem differenciam posicionis, etiam in tantum rapitur quod si ferrum ponatur in vase pleno aqua et magnes ponatur sub vase pars tacta demergit se in aqua* | (fol 83, at foot, continues) *in directum magnetis Et si deferatur magnes undique extra vas, ferrum super partem tactam erectum currit in directo cuiuslibet loci ad quem defertur magnes Et si alia pars magnetis obiciatur parti ferri tacte fugiet eam sicut inimicam, et sicut agnus lupum Et ablato magnete pars tacta dirigit se ad locum celi similem parti magnetis Vulgus philosophancium nescit causas experiencie vulgate in hac parte, et credit quod stella nautica faciat hoc. Set stella non facit hoc, set pars celi.*

There is no indication that this note is to be read in at any special point in the text It is quite appropriate with the passage below which it stands, or with the closing portion of Chapter VIII The note itself is an almost literal transcript from Roger Bacon, *Opus Minus*, p. 353.

P 82, line 17 *Quare a polis mundi poli magnetis virtutem recipiunt*, also in D_4, T.   *Quare manifestum est quod a Polis Mundi poli Magnetis virtutem recipiant* G   *Quare a polis mundi magnetis virtutes recipiunt* D_1.   *Qualem a polis mundi poli magnetis recipiunt* D_7.   *virtutem recipiunt* P.

P. 83, line 5. *ut non sic solum polos lapidis a polis mundi*; also D_7, P   *ut non sic polos lapidis a polis coeli vel mundi* G   *ut non sit solum polos lapidis a polis celi* D_1 *ut non sit polos mundi a polis lapidis* D_3.   *ut non sit solum polos mundi a polis lapidum* D_4 *ut non tamen sis a polis mundi polos lapidum* T.

P. 83, line 6 *influentiam cum virtute estimes*   *virtutem et influentiam existimemus* G.   *influentias cum virtute estimes* P.   *influenciam et virtutem existimes* D_3 *influentiam et virtutem estimes* V_3, L, D_1, D_4, D_7.   *existimare potes influentiam* M   *influentiam et virtutem existimaveris* T.

P 83, line 7. *et post dispone super duos stilos acutos lapidem*, also in D_7, P   *et postea dispone ipsum super duos stilos acutos lapidis* G   *post dispone lapidem super duos stilos acutos* D_4, T

P. 83, line 9. *ut lapis sine difficultate super eos possit moveri*; also in D_7, P   *ut scilicet lapis super eis sine difficultate possit moveri* G.   *et lapis sine difficultate super eos possit moveri* D_1 *ut lapis sine difficultate possit movere super eos* T.

P. 83, line 10. *partis*, also in G, D_1, D_5, D_7, P   *pars vel partes* D_4, M, T.

P. 83, line 11. *leviter*; also in D_1, D_7, P, T.   *leniter* G

P. 84, line 2 *per suos stilos.*   *super suos stilos* G, D_1, D_7, P   *super duos stilos* D_4, D_5, M, T.

P. 84, line 4. *Et si tunc* . . .   *Quod si tunc* G, V_3, V_4, D_1, D_4, D_5, D_7, T.   *Quod si autem* P.   *Quod si lapis tunc* M.

P. 84, line 6. *potiusquam nature*; also in D_1, D_3, D_4, D_5, M, T.   *potius quae Naturae* G, D_7.

P. 84, line 6. *defectus imputetur*; also in D_1, D_7, M.   *defectui imputes* G   *defectu imputetur* D_3, D_5.   *defectui imputetur* V_3, L, D_4, T.

P. 84, line 8. *obcecari seu ebetari*; also in D_7 *hebetari seu obcecari* G.   *ebetari* D_4, D_5, T.   *hebetari* D_1.   Omitted in M.

PART II. CHAPTER I

P. 85, line 5. *Visis operibus naturalibus magnetis.*   *Visis naturalibus operibus magnetis* D_2.   *Visis operibus naturalibus Magnetis manifestis* G.   *Visis operibus magnetis manifestis* D_1.   *Visis quidem operationibus virtutibusque magnetis* D_3.   *Visis operationibus magnetis manifestis* D_5.   *Visis operibus naturalibus manifestis* D_7.   *Visus* (sic) *naturalibus operacionibus* M.   *Visis operacionibus naturalibus magnetis* D_4, T   *Visis operibus naturalibus magnetis manifestis* B.   *Visis operibus naturalibus magnetis et manifestis* P.

P. 85, line 5. *accedamus manifestare ingenia*   *accedamus ad instrumenta* G.   *accedas ad ingenia* D_1.   *manifestare ad ingenia* D_3.   *accedamus ad ingenia* D_4, D_5, D_7, P, M, T.

P. 85, line 8. *inter polos*; also in D_1, D_5, D_7, P.   *inter duos polos* G, V_3, D_4, T.

P. 85, line 11. *aperiantur, et ut*; also in D_1, D_4, D_5, D_7.   *magis aperiantur nec* G.   *aperiantur ut aqua non* M, T.

P. 85, line 11. *ingrediatur*; also in D_1, D_7, P, M.   *subingrediatur*, D_4, D_5, T.

P. 85, line 18. *fit.*   *sit* G, V_1, V_2, V_3, V_4, L, D_1, D_5, D_7, M, T.   *sint* D_4.   *sic* P.

P. 85, line 19. *sic situati*; also in G, D_1, D_7, M.   *sic situati sive signati* D_4, T.   *situati sive signati* D_5.

P. 85, line 20 *in omni regione*; also in D_1, D_5, D_7, M.   *in illa regione* G.   *in omni regione magna* P   *in omni regione vel regno* D_4, T.

P. 85, line 21. *et sic habebis*; also in D_1, D_4, D_7.   *et sic habeas* G.   *et sic habes* T.

P. 85, line 22 *quatuor quartas*; also in G, D_1, D_7, P.   *quatuor partes* D_5, M.   *quatuor partes tractatas* D_4, T.

P. 85, line 22. *signatas*, also in G, D_1, D_5, D_7, P *designatas* D_4, M, T

P 85, line 23 *in partes nonaginta dividatur ut sint in universo partes CCCLX* *in 90 partes dividi debet ut sint in universum 360 partes.* G *in partes 90 dividuntur ut sit in universo 360 partes* D_1 *in 90 partes dividatur ut sint in limbo in universo 360 partes* D_2, D_4. *in partes 90 dividatur ut sint in universo 360 partes,* D_5, D_7, P *in quo* (sic) *dividatur ut sint in limbo in universo 360 partes* M. *in tres partes dividatur ut sint in limbo in universo 360 partes* T.

P 86, line 1. *consueverunt inscribi*; also in G, D_1, D_4, D_7, and T. *consuetur est describi* D_3 *consuetur est scripsit* M (sic).

P 86, line 1. *Erit*; also in G. *Sit* D_3, D_4, T. *Et* D_1, D_7

P. 86, line 6 *manu una*; also in G, D_7, P. *altera manu tua* V_3, T. *manu tua* D_1, D_4, M.

P 86, line 7. *ostendit*, also in D_4, D_5, T *ostendet* G, D_1, D_7, M

P. 86, line 10 *ad lunam et stellam*, also in D_1. *ad lunam et stellas* G, D_3, D_7, P. *ad lunam et ad stellas* D_4, M, T.

P 86, line 12. *regule*; also in G, D_7. *regule ex parte stelle vel lune* T. *regule ex parte stelle* V_2, V_3, V_4, L, D_1, D_4.

P 86, line 13. *Ascendens et Ascensiones et cuncta*; also in G, D_7, P. *ascendens et cuncta* D_1, D_5, V_2, V_3, V_4, L. *ascensus et omnia* D_4. *ascendens et omnia* M, T

P. 86, line 14 *secundum*; also in G, D_7, P. *iuxta* V_2, V_3, L, D_1, D_3, D_4, D_5, M, T.

P. 86, line 15. *doctrina*; also in V_3, D_1, D_5, D_7, P. *figura* G, D_4, M, T. *forma* D_3.

CHAPTER II

P. 86, line 17. *De compositione instrumenti melioris officii eiusdem*; also in G. .. *instrumenti melioris eiusdem officii* D_1. *Ad compositionem* . . . D_3 . . . *alterius instrumenti melioris et certioris* . . . D_4 . . *alterius instrumenti melioris eiusdem ingenii vel officii* D_5. *De compositione alterius instrumenti melioris eiusdem officii* D_7. *In hoc autem capitulo dicemus tibi modum compositionis alterius instrumenti melioris cum certioris effectus* P. *In hoc capitulo dicuntur tibi modum compositionis alterius instrumenti melioris et certioris eiusdem officii* M *De compositione alterius instrumenti melioris et certioris eiusdem officii* T.

P. 86, line 20. *tornatum*; also in D_1, D_2, D_5, D_7. *formatum* D_3, D_4. *formatum sive tornatum* T. *contractum* G. *compositum* B.

P. 86, line 23. *de materia transparenti*; also in D_4, T. *nature transparentis* D_1, D_7. *materie transfluentis* M.

P 87, line 9. *summitas eius*; also in D_7. *summitas acus* V_2, V_3, V_4, L, D_1, D_4, P, M, T.

P. 87, line 10. *in instrumento*, also in G, D_1, D_7. *instrumenti* M, T

P. 87, line 11 *supra dicto*, also in G, D_1, D_7 *supra dicto in alio instrumento* D_4, T.

P. 87, line 14. *sunt tibi note*, also in D_1, D_7, P, M. *tibi sunt notae* G. *sunt tibi note et certe* T. *sunt note tibi* D_1.

P. 87, line 14. After the words *sunt tibi note*, Codex L inserts the following, which has not been found in any other manuscript:—*quia si villa vel insula ad quam volo ire est minoris latitudinis quam locus in quo sum, vadam directe ante me versus caput regulae, quod est ad solem vel stellam. Si vero sit maioris latitudinis, vadam retro me directe versus caput aliud regulae.* The use of the first person, which does not occur in any other descriptive part of the Epistle, confirms the opinion that this passage is spurious.

At this point Codex D_3 adds the words *Ecce figura instrumenti*.

P. 87, line 15. *in aere virtute lapidis stet*, also in D_7. *in aere stet virtute lapidis huius* G. *stet in aere per virtutem huius lapidis* V_2, V_3, V_1, D_1, D_4. *stet in aere per virtutem lapidis* P, L, T. Omitted in M.

P. 87, line 16. *narrabimus*, D_1 substitutes *invenitur*. T adds after *narrabimus*:—*in capitulo sequenti*.

At this place Codex L adds another passage, as follows:—*Nota quod partem meridionalem acus in usu directorii debemus facere declinare per unum punctum versus occidens. Et hoc debet fieri per declinationem partis septentrionalis ad oriens, quia pars meridiana instrumenti divisionibus caret.* At this point the ordinary text of the manuscript, which is folio 58 *recto*, a little more than half-way down the page ceases, and in the lower part of the page there are drawn three concentric circles, apparently with the intention of inserting the figure (Fig. 2 of Gasser's printed edition) with the graduations into 4 and 360 parts as described in the text. But the interior of the figure has never been drawn, and instead there has been inscribed inside the following passage:—*Nota quod lapis magnes vel etiam acus confricatus cum ipso non directe tendit ad polos. Sed pars quae ad meridiem tendere reputatur, aliquantulum declinat ad occidens, et illa quae ad septentrionalem respicere creditur, tantundem ad oriens se inclinat. Quanta autem sit huius inclinatio, inveni multis experientiis, videlicet 5 gradus*[1]. *nec tamen huius declinatio in usu directorii nos impedit, quod ipsam acum a vera meridie per unum punctum cum dimidio fere, versus occidens facimus declinare. Punctus enim continet 5 gradus. Causam predicte declinationis quere in scedula posita in quarto tractatu Kalendarii.* This passage is written in a smaller size of writing, but apparently by the same hand as the preceding text, a handwriting of the sixteenth century. The last 8½ words are written in the margin, there not being any more space within the circles. Now this is the famous passage found by Thévenot, in 1681, and announced by him as proving that the declination of the needle was already known in the year 1269. As Father Bertelli has amply demonstrated, the

[1] Father Bertelli in his second memoir, p. 26 (footnote) reads the words here given *videlicet 5 gradus* as *vij scilicet gradus*, the contractions in the MS. being difficult to decipher. He further comments on the discrepancies of the text in his Note on the Two Codices in Tom. IV of the *Bullettino di Bibliografia*.

passage is spurious, added by a later copyist No such passage exists in any other of the manuscripts that have been examined The other passage mentioned above (beginning *Nota quod partem*), which is also found only in the Leyden MS, is presumably likewise spurious.

P. 87, line 17 *Et hec est iam dicti Instrumenti descriptio*, also in D_4, D_7 *Et hec est iam dicti lapidis instrumentalis descriptio, ut hic depicta est.* G *Hec forma sequens est predicti instrumenti descriptio.* T *Et instrumenti iam dicti descriptio patet infra tali signo* ⊛ ⊛. V_3 In D_4 follow these words — *Nota quod hoc instrumentum sine figura fit ad modum alterius figurae positae in proximo folio ante*; and Fig. 2 is omitted. At this point, beneath the woodcut representing the instrument, Gasser's edition adds these words — *Totum coperculum sit de cristallo, vel simili materia transparente ut limbum A, B, C, D, contineat · limbus vero hanc totam superficiem continens, videlicet F, G, H, I, est circulus pixidis continentis constituens cum coperculo superficiem unam, &c* This passage is not found in any of the manuscripts, and is possibly an editorial note by Gasser.

CHAPTER III

P 88, line 2 *De Compositione Rote.* *De Artificio Compositionis Rote perpetui motus* G, D_1 *De artificio operationis rote perpetui motus* D_5, D_7. *De compositione cuiusdam rote que continue et perpetue movebit* D_4 *De compositione cuiusdam rote que continue et in perpetuum movebitur*. T. *De artificio compositionis rote vive* V_3

P. 88, line 8. *concavam*, also in G, D_1, D_6, D_7, P. *concavatam* D_3, D_4, M, T.

P. 88, line 13 *propinqui ita*; also in G, D_4, P, T. *propinquitatis* D_7 *propinqui* V_2, V_3, V_4, D_1.

P 88, line 13. *plus quam*; also in G, D_1, D_7, P *plusquam quantitatem* D_4, T. *plus quam quantitas* M

P 88, line 19. *figuretur*; also in G, D_1, D_7, P *preparetur* D_4, M, T

P 89, line 4 *in ferreos*, also in G, D_1, P. *ut ferreos* D_7 *ferri* T *in ferrum vel* D_4 *in ferro* (sic) M.

P. 89, line 7. *in tractu perpetuo fugaque perpetua*; also in D_7, P *in tractu perpetuo et fuga perpetua* G. *in tractatu* (sic) *perpetuo et fuga*, D_1 *in tractu perpetuo fugaque perpetua contrarie moveatur* D_2. *ut tractu perpetuo et fuga perpetua continue movetur ut paret hoc exemplo.* D_3 *ut tractu perpetuo fuga que perpetua continue movebitur ut paret in hoc exemplo* M. *in tractu perpetuo fugaque perpetua ut continue moveatur*. D_4. *ut tractu perpetuo continue moveatur.* T

After the above sentence, Codices D_2, D_3, and M differ from the rest

D_2 reads.—*Potest enim fieri per virtutem huius lapidis ut ferrum stet in aere et hoc si ponantur in circulo quodam 4 lapides equales virtutis et in medio.*

ubi debet esse unum centrum pone ferrum et non inclinabit ad unam partem nec ad aliam propter equalitatem virtutis.

D_3 reads :—*Nota Etiam quod si in circulo ponantur quatuor magnetes equalis virtutis et in loco centri ponatur ferrum ibi stabit non declinans huic aut inde*

M reads :—*Etiam fieri per virtutem illius lapidis ut ferrum stet in aer et hoc si ponantur in circulo quolibet 4 lapides equalis virtutis ac in medio ubi debet esse centrum pone ferrum non inclinabit ad unam partem vel ad aliam propter equalitatem virtutis et c*[a]

Codex R (Florence) has after the words *fugaque perpetua* the following passage :—*Et valebit adhuc ut scilicet in capsula ponatur calculus qui cadat inter duos denticulos quia movebitur ad inferius, et in rota movebitur superius; et iuvabit motum rotę.* And, in a later hand :—*Nam secreta lapidis magnetis tantum describit pulcherrima quidem et digna ut construetur pro horologus et alus*

P. 89, line 8 *suum rotula*; also in P, D_7 *rotula suum* G, D_4, T (omitted in D_1).

P. 89, line 10. *inter duos quoslibet denticulos*, also in D_1, D_7, P. *inter quoslibet duos denticulos* G, T. *inter denticulos duos quoslibet* D_4.

P. 89, line 12 *etiam casus calculi erit.* *etiam et casus calculi erit.* G, D_7 *etiam cum casus calculi erit* P. *erit etiam casus calculi.* T.

P. 89, line 16. *ut presens demonstrat descriptio*, also in D_4, T. *veluti sequens depictum diagramma commonstrat* G. *ut demonstrat descriptio* D_1. *ut presens demonstrat descripcio. Explicit epistola Petri Peregrini de Magnete.* D_6. *ut presens demonstrat descripcio. Explicit* D_7. *ut presens demonstrat descriptio. Explicit iste tractatus.* B *ut presens demonstrat descriptio. Explicit tractatus de Magnete et rota viva* P. *ut presens demonstrat inscriptio. Vale Actum in castris in obsidione nocherie Anno domini M° CC° LXIX°, 8° die Augusti.* L. *ut presens demonstrat descriptio. Explicit tractatus de magnete. Vale. Anno Domini Actum in castris in obsidione lucerie. Anno domini 1269° 8° die augusti.* V_3. *ut presens demonstrat descriptio Finis.* V_4. *ut presens demonstrat descriptio. Explicit libellus de magnete* V_1 *ut presens demonstrat descriptio. Actum in castris in obsidione Lucerie anno domini MCC° LXIX° : VIII Augusti. Explicit.* V_2.

Examination of the above analysis will show that D_4 and T, both of which are fourteenth-century manuscripts written by English scribes, present many readings in common, and that in many of these they concur with the text of Gasser's edition and differ from that of Bertelli. Gasser appears to have made several entirely arbitrary emendations; for example, *charissime* for *intime* (p. 71, line 4); *eligatur* for *erigatur* (p. 71, line 7); *instinctu Naturae* for *nutu Dei* (p. 75, line 9); *latus* for *partem* (p. 77, line 9); *adscissere* for *assimilare* (p. 78, line 17); *instrumenta* for *ingenia* (p. 85, line 5); and the

description added beneath Fig. 2. But with such exceptions Gasser's readings are mostly supported by others of the older manuscripts. Codex M is inferior to the rest as a piece of copying. Its first word, which should be *Inter*, is written *Item*. It omits many sentences from Chapters III, V, VI, and IX in Part I, as does also D_3, with which it is most nearly related. For *visis naturalibus operationibus* (p. 85, line 5) it has *visus naturalibus operacionibus*. Where other MSS. read *in partes 90 dividatur*, or *in 90 partes dividatur* (p. 85, line 23), it gives *in quo dividatur*. The words *consuetur est inscribi · sit* &c. (p. 86, line 1) it renders as *consuetur est scripsit*. It changes *summitates stilorum* (p. 86, line 11) into *summitates stellarum*. For *formatum sive tornatum* (p. 86, line 20) it reads *formatum seu cernatum*. It is however of use as confirming certain readings in D_4 and T where these differ from the accepted version.

Until the remaining manuscripts in Erfurt, Vienna, Dublin, and Geneva shall have been critically examined, it will be premature to determine what readings ought to be finally adopted for all the doubtful passages, but as to many of them the materials now collected are adequate. None, however, of those which remain doubtful involves any question as to the extent of Peregrinus's scientific knowledge, or affect the interpretation to be attached to his descriptions of his inventions.

APPENDIX A

LIST OF MANUSCRIPTS OF THE *EPISTOLA DE MAGNETE* OF PEREGRINUS (A.D. 1269)

1. *Library of the University of Leyden* (MSS. Chemici Vossii, No 64). *Epistola Petri ad Sygerium super rationibus naturae magnetis.* MS. of the fifteenth century, or perhaps of the early sixteenth. (Codex L.)
2. *Bibliothèque Nationale, Paris* (No. 7378 A) *Epistola Petri Peregrini de Maricourt ad Sygerium de Fontancourt militem, de Magnete* A much mutilated parchment MS of probably late fourteenth century. This MS. is transcribed (with many lacunae) in Libri, *Histoire des Sciences Mathématiques*, vol. ii, note 5. (Codex P.)
3. *Bibliothèque Nationale, Paris* (No. 7215). A fragmentary MS., being a palimpsest of the fourteenth century, without title, but having the words *Tractatus de Magnete* written in the margin of first page. (Codex Pf.)
4. *Vatican Library* (No. 4082). *Epistola Peregrini de Maricourt ad Ysagerum de Faucaucort, militem, de magnete.* A very perfect MS, with the three figures almost as perfect as in the printed edition of 1558, but has no date. It is in writing of the beginning of the fourteenth century. (Codex V_1.)
5. *Vatican Library* (No. 5733). *Incipit epistola Petri peregrini ad Sigerum de magnete.* An imperfect and inferior MS. of the sixteenth century, destitute of any figures, but at the end gives the place, year, and day on which the Epistle is dated. (Codex V_2)
6. *Vatican Library* (Regina Svecorum, No 1072). A thirteenth-century MS on parchment, probably the oldest extant. It gives the year and day, and the camp before Lucera as the place from which the Epistle was dated. It has no figures, but gives references to such, as though the scribe intended to add them. (Codex V_3.)
7. *Vatican Library* (No. 5733). A MS. of the sixteenth century, on parchment. It follows three MSS. of treatises attributed to Roger Bacon, and instead of giving the name of the author as Peregrinus attributes the work to Bacon. (Codex V_4.)
8. *Biblioteca Riccardiana, Florence* (No. 923). *Peregrini de Maricaure ad Sygerium de Lapide Magnete.* An abbreviated and defective edition in writing of the sixteenth century. (Codex R.)

9. *Bodleian Library, Oxford* (MS. Bodl., No. 1629 · Digby MSS., No. 28, fol 18) A small quarto MS of late thirteenth or early fourteenth century, entitled *Petrus Peregrinus de Magnete.* (Codex D_1.)

10 *Bodleian Library, Oxford* (MS Bodl., No. 1676 Digby MSS., No. 75, fol. 65). *Tractatus Petri Peregrini de Natura Magnetis.* This 8vo MS. of the fifteenth century contains only Chapters I to III of Part II, preceded by fourteen lines taken from Cap. X of Part I. (Codex D_2.)

11. *Bodleian Library, Oxford* (MS. Bodl., No 1794 Digby MSS., No. 193, fol 13). A fourteenth-century MS, probably later than the preceding, entitled *Petri Peregrini Epistola ad Maharicurth et ad Sigerum de Feucicort de Magnete* On the margin is written, in a later hand, *R Bakon de naturâ magnetis* quidam attribuunt *Petro P'grino sive de maharicuria* The first part is much abbreviated, Chapters I and II being omitted. The MS. has many contractions, but has three fairly good figures. (Codex D_3.)

12. *Bodleian Library, Oxford* (MS Bodl., No. 1748 · Digby MSS., No 147, fol. 63). This is a vellum MS, sm folio, fourteenth century, of 206 leaves, formerly belonging to the church of St. Mary, at Merton, Surrey It is written not very uniformly, in a small hand, by an English scribe well preserved, and with wide margins. It is rubricated throughout rather crudely. It has two diagrams of no particular merit; and has no date or place at the end. (Codex D_4.)

13. *Bodleian Library, Oxford* (MS. Bodl., No. 2458 MS. Bodl., 464, fol. 80v, formerly F. 9. 5). A fine folio MS. of vellum, very uniformly and boldly written right across the page, of 205 leaves, 37 lines to the page, rubricated It is of the early fourteenth century. On fol. 82 verso and fol. 83 recto there is written across the bottom a footnote of ten lines in another, apparently contemporary hand. The treatise ends on top of fol. 88 verso, without any place or date, with the words: *Explicit epistola Petri Peregrini de Magnete.* There are no figures. (Codex D_5.)

14. *Bodleian Library, Oxford* (MS. Bodl., No 3467 · MS Selden, supra 79, fol. 171). A small quarto paper MS, probably of the seventeenth century. It begins by stating that the passage is quoted from a certain MS codex, found amongst the books of Dr. Dee, which began *Iste tractatus de magnete duas partes continet*, &c. The passage copied out is Cap. III of Part II. In the margin is a reference to another part of the present MS. (fol. 146), in which the corresponding portion of Taisnier's book is copied. The copyist then says that he has since seen the Augsburg edition of 1558, of which he gives the title-page, and he adds that it agrees verbatim with the MS. example which he has above copied out. He copies Gasser's picture

of the wheel of perpetual motion, and also Gasser's diagram, Fig. 1 (Codex D_6.)

15. *Bodleian Library, Oxford* (MS Bodl., No. 7027 MS Ashmole, 1522, fol 181). This is a fine fourteenth-century MS, folio, of 203 leaves, 9 × 11 inches, written in Gothic letters in two columns of thirty-five lines each. It is rubricated in red and blue throughout. There are two excellently drawn diagrams, corresponding to Figs. 2 and 3 of Gasser's edition. The MS. is a collection of ancient mathematical treatises, uniformly written in the time of Edward II, before the middle of the fourteenth century. It includes three treatises of Sacrobosco, two of Thebit Ben Korrah, and the *Perspectiva* of Archbishop Peckham, here called *De Speculis*. The title of the treatise, which begins on folio 181, is *Epistola Petri Peregrini de Maricourt ad Sygetum de Foucancort, militem* It opens *Iste tractatus de magnete duas partes continet.* After the passage enumerating the contents of the chapters comes the usual dedication. *Amicorum intime, quandam magnetis occultam naturam a te interpellatus, rudi narratione tibi reserabo cum uscunque*, &c. It ends, without any statement as to date or place of origin, with the words · *ut presens demonstrat descripcio. Explicit.* (Codex D_7)
16. *Library of Trinity College, Dublin* (classed as D 2 29, No. 403) A parchment MS. of about the fourteenth century, formerly in the collection of Archbishop Ussher. It ends with the sentence *Sint autem loca . . ut praesens demonstrat descriptio*, followed by the words · *Explicit epistola Petri Peregrini de magnete.* (Codex U)
17. *Library of Gonville and Caius College, Cambridge* (Class E, No. 147). This is a late sixteenth or seventeenth century MS., written in a very neat hand. The text is in English translated from the printed edition of Gasser of 1558. (Codex C.)
18. *Bibliothèque publique de la Ville de Genève* (MSS. latins, No. 80). This is a paper MS of the second half of the fifteenth century, of sixty-five leaves, 8 × 10 inches, containing a number of treatises on Astronomy and other scientific subjects. The writing is uniform, and bears no date. The treatise *Epistola Petri Peregrini de Maricourt ad Sigerum de Foucaucourt militem de magnete* occupies folios 16 to 22. (Codex S.)
19. *Biblioteca della R Università di Torino* (No. G. V. 10). This is a late MS. copied out from the printed edition of Gasser, Augsburg, 1558. (Codex Y.)
20. *Library of Silvanus P. Thompson* (No. 3). A small vellum Italian MS. of the fourteenth century, of eighty-two leaves, $3\frac{1}{2} \times 5\frac{1}{4}$ inches, beginning on folio 55 verso, *Epistola Peregrini de Maricourt ad Sygerum de Fautancort, militem, de magnete.* No date or place is given. There are no figures. The MS. ends on folio 64, col. 1, with the usual sentence *Sint autem loca . . . ut presens demonstrat descriptio*, and the words *explicit iste tractatus.*

This MS. was formerly in the Library of Prince Boncompagni (No 249), and was taken by Padre Bertelli as the basis of his printed version. (Codex B)

21. *Library of Silvanus P. Thompson* (No. 1). A vellum MS. written by an English scribe in A.D 1391, containing also a Latin treatise on Surveying and a version of Chaucer's Astrolabe in English, roughly bound in parchment, lettered 'Chaucer's Mathematical Works, 1391'. This was formerly amongst the Phillipps MSS, and numbered 11955. It is very uniformly written on thirty-one leaves (the last a blank) measuring $6\frac{3}{4} \times 10$ inches, but folio 2 is missing. The MS. begins on folio 1 *Incipit tractatus magnetis Amicorum intime*, &c., and ends on the upper part of folio 6 with the usual sentences *Sunt autem loca . . . ut presens demonstrat descriptio. Explicit tractatus magnetis.* No date or place of the Epistle is given. There are three rudimentary diagrams corresponding to the three in Gasser's edition of 1558 ; but of these the second only has been completed. The MS is rubricated throughout, and has decorative initials in blue and red. A facsimile photolithographed edition, in colours, was printed from this MS. in 1900 by the late Mr. Bernard Quaritch. (Codex T.)

22, 23 and 24. *Library of the University of Erfurt, Amplonian Collection of Manuscripts* (Nos. Q 325, Q 351 and Q 387). These three MSS. have been announced by Professor G. Hellmann in the *Rara Magnetica*, 1898. They have not yet been critically examined. (Codices E_1, E_2 and E_3)

25. *Imperial Library at Vienna* (Cod. Vindob. 5311). This is a Latin MS of the fourteenth century, extending from fol. 61 verso to fol. 63 verso. The title is *Peregrinus de Maricourt, de magnete.* It has not yet been examined. (Codex A_1.)

26 and 27. *Imperial Library at Vienna* (Cod. Vindob. 5969, saec. xv–xvii, ff. 180–199 verso ; and Cod. Vindob. 6256, saec xvii, f. 219). These are two copies of an Italian translation, *Trattato della pietra calamita et di una rota del moto perpetuo . . fatto in volgare per Filippo Pigafetta* They begin *Questo trattato della calamita . . .* and end : *si come la seguente figura dimostra.* Professor G Hellmann, by whom these particulars are given, has not yet examined the manuscripts critically (Codices A_2 and A_3.)

28. *British Museum, London* (Egerton MS. 2852). A vellum MS. of the late fourteenth century with viii + 129 leaves, about $6 \times 8\frac{1}{2}$ inches This is a mixed collection, chiefly on geometry, astronomy, and pharmacy. Fol. 57 begins, without any title, after one introductory sentence, thus —*Cognoscitur autem iste lapis quatuor differentiis, scilicet, colore*, &c. These are the opening words of Cap. 3, Part I of the Epistola of Peregrinus. From this point the MS. follows the usual text not too closely, for the scribe was apparently very careless or illiterate,

down to fol. 61 verso, where, after the words *sic enim quam quilibet denticulus in tractu perpetuo fuga que perpetua movebitur ut patet in hoc exemplo*, which are found near the end of Cap 3, Part II of Peregrinus, the text changes altogether, its last six lines being different. There are three degenerate diagrams roughly corresponding to the three of the Augsburg edition. (Codex M.)

Other MSS Other manuscript copies have formerly existed, but have been lost sight of. For example, the MS Catalogue of Amplonius Ratinck, written by him in 1412, includes a fourth copy, *Tractatus de magnete Peregrini*, beside those named above. The particular copy from which Gasser produced the version of 1558 is unknown, none of the MSS. enumerated above corresponding precisely with Gasser's text. Bertelli mentions others. One was formerly in the Library of the monastery dei Canonici Regolari di S. Antonio a Castello di Venezia. This copy, which is mentioned by Cabeo as having been consulted by Garzoni, was probably destroyed by fire either in 1636 or in 1687. There appears to be another copy in the Biblioteca Magliabechiana of Florence, having apparently been formerly in the possession of Cosimo de' Medici. If further MSS. exist, they will probably be found in obscure collections in Italy or South Germany.

APPENDIX B

PRINTED VERSIONS OF THE *EPISTOLA DE MAGNETE* OF PETER PEREGRINUS

1 PETRI PEREGRINI | MARICVRTENSIS | De Magnete, seu Rota perpe-|tui motus, libellus. | Diui FERDINANDI Rho|manorum Imperatoris auspi-|cio, per Achillem P· Gasserum | L nunc primum pro-|mulgatus. | AVGSBVRGI IN | SVEVIS. | Anno Salutis | 1558. Four ll preliminary, including title with woodcut border, Sigs. A, B, C, D, E, F, all small 4to. No colophon. Last page blank. After the title comes a dedication to the Emperor Ferdinand, followed by a preface by Gasser. The Epistola begins on the middle of the verso of B iii and ends on E iii. Then follows an address by Gasser *Ad Lectorem*, which includes a valuable enumeration of books that deal with the subject of the magnet. Finally on F ii begins a reprint of Chapter XLVIII of Book IX of the *De Rerum Varietate* of Cardan, on the magnet and on the alleged perpetual motion.

2, OPVSCVLVM | PERPETVA ME-|MORIA DIGNISSIMVM, DE | NATVRA MAGNETIS, ET EIVS | EFFECTIBUS. | . . . . . | Authore Ioanne Taisnerio Hannonio, vtriusque | Iuris Doctore, &c. [Printer's mark] | COLONIAE, | Apud Ioannem Birckmannum, | Anno M.D.LXII. Small 4to; A to K, all fours, and L, which is six leaves.

A woodcut portrait of the Author is at the back of the title, and is repeated on the last leaf. Leaf A_2 contains the dedication The paging begins on A_3, and ends p. 84 (erroneously printed p. 80) on L_5 verso.

This work is a plagiarism of Peregrinus. Pages 1 and 2 are introductory matter dealing with knowledge of the magnet mostly as found in Pliny's *Hist Nat*, and with certain myths of the magnet. From line 23, p 2 to line 9 of p 3 is a summary of Chapters I and II of Part I of Peregrinus. The matter which follows corresponds to the successive chapters of Peregrinus in the following order:—

line 9, p. 3 to line 19, p 3	corresponds to	Chapter III of Part I.
line 20, p 3 to line 2, p. 5	„ „	Chapter IV „
line 3, p. 5 to line 4, p. 6	„ „	Chapter V „
line 5, p. 6 to line 17, p. 6	„ „	Chapter VI „
line 18, p. 6 to line 21, p. 6	„ „	Chapter VII „
line 22, p. 6 to line 25, p. 6	„ „	Chapter VIII „
line 26, p. 6 to line 10, p. 8	„ „	Chapter IX „
line 11, p. 8 to line 4, p. 10	„ „	Chapter X „
line 5, p 10 to line 13, p. 10	„ „	Chapter I of Part II.
line 14, p. 10 to line 9, p 15	„ „	Chapter III „

The remainder of the work is devoted to proportional motion and to the tides. The woodcut figures differ entirely from any of those given in the manuscripts of Peregrinus, or in the Augsburg edition. Lipenius states that there are two editions, one 1538, the other 1562, but the former is doubtful.

3. A VERY NECESSARIE AND | PROFITABLE BOOKE CONCER|NING NAUIGATION, compiled | in Latin by IOANNES TAISNIE|RIUS &c . . . . | Translated into Englishe, by | RICHARDE EDEN. | . . . . . | Imprinted at London by | Richarde Iugge. | London (1579 ?).

This is an English translation of Taisnier's plagiarized version of Peregrinus. It follows the Latin version precisely. The woodcuts are much better cut than those in the Cologne edition.

4. CAVALLO (Tiberius, F.R.S.). *A Treatise on Magnetism. The third Edition, with a Supplement.* London, 1800. p. 299 An Account, with extracts, of a Curious Letter of Peter Adsiger on the Properties of the Magnet. p. 301. Letter of Peter Adsiger on the Description of the Nature of the Magnet.

This is a shortened transcript in Latin, with an English version, of the Leyden manuscript. It gives the Prologue, beginning *Amicorum intime*, but omits Chapters I, II and III, also parts of Chapters VI and VIII, Chapters IX and X of Part I, and also Chapters I and III of Part II

5. LIBRI (Guillaume). *Histoire des Sciences Mathématiques en Italie. ...* Paris, 1836, Tome II, Note 5, p. 487. This Note gives a transcript, with many lacunae, of the version found in the MS. in the Bibliothèque Nationale. Libri states

that he found the text difficult to read by reason of the many contractions it contains. He reproduces the various diagrams, which, however, are very imperfect.

6. Bertelli (P D. Timoteo, Barnabita) *Sulla Epistola di Pietro Peregrino di Maricourt. . Memoria Seconda.* Roma, 1868. (*Estratto dal Bullettino di Bibliografia*, Tomo I)

This memoir begins by reciting the various MS. Codices and versions of the Epistola de Magnete, and gives, from p. 8 to p. 27, a complete Latin version, with the title EPISTOLA PETRI PEREGRINI DE MARICOURT AD SYGERUM DE FOUCAUCOURT MILITEM DE MAGNETE. This version, which may be called the *Textus receptus* of the Epistola, is founded chiefly upon the MS. Codex B, then in the possession of Prince Boncompagni; but with very numerous variants and readings from the other codices, including three of the Vatican MSS, the Paris MS, the Florence MS., and the printed edition of Gasser of 1558. It is also abundantly annotated. The memoir, which extends to 178 pages, discusses the early history of magnetism by reference to the writers of both earlier and later time, and is particularly valuable in throwing light on the invention of the Mariner's Compass The memoir is enriched by two lithographed plates in which are reproduced the figures from the Augsburg edition, and some others taken from the Paris and Vatican MSS., together with a hypothetical representation of the pivoted compass described by Peregrinus

In a subsequent (third) memoir, *Intorno a due Codici Vaticani della Epistola de Magnete di Pietro Peregrino di Maricourt*, in T. IV of the *Bullettino di Bibliografia*, Father Bertelli gave a further number of *variorum* readings from the texts of Codices V_3 and V_4.

7. Peirce (Charles S.) In 1892 Mr. C. S. Peirce proposed to publish a version of the *Epistola* based on the Paris manuscript (Codex P). In furtherance of this he printed a preliminary pamphlet with a fragment of the proposed work. Its title was as follows:—*Prospectus* | *Of an Edition of* 300 *numbered copies* | (150 *for America*) *of* | *The Earliest Work of* | *Experimental Science* | *The Epistle of Pierre Pelerin de* | *Maricourt to Sygur de Foucau-*|*court, Soldier, On the Lodestone.* | This pamphlet of ten leaves (including cover) contains eleven pages of introductory matter, including a preface by Mr. Peirce stating that he believed the work never to have been printed except at Augsburg in 1558, and announcing that the book would go to press January 1, 1894, to be printed by Mr. De Vinne. Pages 7 to 11 are occupied by quotations from Roger Bacon on Peregrinus. On p 12 begins the Latin text, in Gothic type, following line for line the Paris MS. (Codex P). The specimen occupies pages 12 and 13, and extends only to the first three sentences of Cap. II of Part I. Pages 14 and 15 give a correspond-

ing specimen of the proposed English version of the same portion Page 16, the last of the matter, gives a specimen of the Notes.

It is much to be regretted that for want of adequate encouragement the proposed work was never issued, though several other sheets were set up in type.

8 HELLMANN (G.). *Rara Magnetica.* Neudrucke von Schriften und Karten uber Meteorologie und Erdmagnetismus, herausgegeben von Professor Dr. G. Hellmann No 10. 4to. Berlin, 1898.

In this reprint of various rare early works on Magnetism, Professor Hellmann has included a Latin version of the *Epistola De Magnete.* This version is avowedly based on that of Bertelli, with about a dozen emendations derived from Bertelli's third memoir. It includes facsimile reproductions of the title-page and of the three woodcut diagrams of the Augsburg edition of 1558.

9. EPISTLE | OF | PETRUS PEREGRINUS | ON THE MAGNET. | Reproduced from a MS. written by | an English hand about A. D. 1390. | London | Bernard Quaritch | 1900 | This is one of Quaritch's Facsimiles of Manuscripts. 8 ll, including title, and one page of introductory matter. The remaining six leaves are occupied by a photolithographic reproduction, in colours, of the MS No. 21 in the list in Appendix A, called Codex T. Small folio size. Only fifty copies printed.

10. EPISTLE OF PETER PEREGRINUS OF MARICOURT, | TO SYGERUS OF FONCAUCOURT, SOLDIER, CON-|CERNING THE MAGNET. | This is the title of a privately-printed work of sixteen leaves, pott 4to, printed in 1902. It bears the following colophon · This Epistle of Peter Peregrinus, On the Magnet, written in 1269, is done into English by Silvanus P. Thompson from the printed Latin versions of Gasser 1558, Bertelli 1868, and Hellmann 1898, and amended by reference to the manuscript copy in his possession, formerly amongst the Phillipps Manuscripts, dated 1391 · and it is now printed in the year 1902, in the Caxton type, by Charles Whittingham and Company, at the Chiswick Press, to the number of 250 copies, of which this is No. . . . . Rubricated by . . . .

The initials are supplied by hand, and the copies are rubricated throughout. There are three diagrams, taken from Gasser, printed in red.

11. THE LETTER OF | PETRUS | PEREGRINUS | ON THE MAGNET, | A. D. 1269 | translated by | Brother Arnold, M.Sc | Principal of La Salle Institute, Troy | with | Introductory Notice | by | Brother Potamian, D.Sc. | Professor of Physics in Manhattan | College, New York | New York | McGraw Publishing Company | MCMIV |.

This edition in small 4to, of sixty-two pages, contains nineteen pages of preliminary matter relating to Peregrinus and to the

former editions and the various versions. The translation, which is made from the Augsburg edition of 1558, extends from page 3 to page 34. It gives the three diagrams of Gasser's edition and two others due to Bertelli, being a hypothetical restoration of Peregrinus's pivoted compass-needle. At the end are five pages of Notes.

APPENDIX C

LIST OF COPIES OF AUGSBURG PEREGRINUS OF 1558

1. Library of University of Pisa.
2. Biblioteca Ambrosiana, Milan.
3. Bibliothèque Nationale, Paris. (Imperfect. Sheet A, four leaves missing. Many MS. emendations in Sheets C and D.)
4. Public Library of Frankfurt am Main.
5. Public Library of Augsburg.
6. Royal Library of Munich.
7. Ducal Library of Gotha
8. Library of University of Gottingen.
9. Library of University of Leyden
10. British Museum, London. (Dr. John Dee's copy.)
11. Library of Royal Society of London.
12. Bodleian Library, Oxford.
13. Library of University College, London.
14. Hof-Bibliothek, Carlsruhe.
15. Stadt-Bibliothek, Hamburg.
16. Library of Institution of Electrical Engineers, London. (Ronalds Library.)
17. Library of American Institute of Electrical Engineers, New York. (Wheeler Collection, formerly in Library of Mr. Latimer Clark.)
18. Library of Silvanus P. Thompson (formerly in Libraries of Dr. Kloss and of Prince Boncompagni).

THE COMMENTARY OF PELAGIUS ON THE EPISTLES OF PAUL: THE PROBLEM OF ITS RESTORATION

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Read December 12, 1906

IN the fourth century of our era the Roman province of Britain was divided into two well-marked parts The northern and western parts were occupied only by troops, whereas the eastern and southern lowlands contained nothing but purely civilian life.[1] The former districts were the scene of camps, the latter of towns and villas. The civilian part was thoroughly Romanized. The language of the people was Latin, and had been so for about two centuries, as the evidence provided by the excavations at Silchester shows. Latin was the official language: Latin was also the spoken language. As Mr. Haverfield puts it, 'Latin was employed freely in the towns of Britain, not only on serious occasions, or by the upper classes, but by servants and work-people for the most accidental purposes. It was also used, at least by the upper classes, in the country.'[2] The same is true with regard to the civilization in general · all the evidence points to the fact that the earlier trades and arts succumbed to the conquering Roman influence.

The third century and the first half of the fourth century were periods of progressive prosperity, but about 350 the decline of Roman influence began, and in 406 or 407 Britain, much to its regret, was severed from Rome. Before this happened, however, the long process of Romanization had culminated, as it might have been expected to culminate, in the production of a great writer, and this great writer was, like all the really great writers of the third and succeeding centuries in the West, a Christian. The Church had followed the march of Roman civilization ever since the days of St. Paul, it had come, doubtless through Gaul, to Britain, and there had been settled Christian communities in Britain from the end of the third century at

[1] Haverfield, *Romanization of Roman Britain* (Proceedings of the British Academy, vol ii) [Lond. [1906], p 8]

[2] Op. cit., p 11

latest. Now one of the sons of the British Church was to write what appears to be the oldest surviving book by a native of this country, and was to give utterance in it to some words by which the Christian thought of all succeeding ages has been affected.

It has been debated whether Pelagius was a citizen of the Roman Empire, belonging to the province of Britain, or an Irishman. The ancient evidence is conflicting. Sometimes he is spoken of as *Britto*, sometimes as *Scottus.* The former epithet seems more likely to be correct, if we take all the circumstances into account. It is more often given to him than the title *Scottus*, which may have been applied to him by the contempt and hatred of his enemies, as the Irish were amongst the destroyers of Roman civilization in Britain. The character of his works shows also that he had received an excellent education, and this it would have been easier for a Briton to obtain than for an Irishman But Professor Bury's solution of the difficulty may be the right one. He supposes that Pelagius was descended from Irish settlers in Somerset, or Devonshire, or Cornwall, or the south-west coast of Wales.[1] There is evidence for the existence of such settlers there, and if Pelagius did indeed belong to that stock, we have an excellent explanation of the double tradition. It was the practice of the Romans to apply the ethnic name to the inhabitants of their provinces, irrespective of race; the term *Brittones* would thus cover Irish people resident in Britain.

But whether Briton or Irishman, he appears to have found his way to Rome in the closing years of the fourth century. We may suppose that he was animated by a thirst for learning, was possessed of considerable private means, and was naturally drawn to the centre of things. In Rome he lived the life of a monk and a student. He occupied himself mainly with the study of the Bible, of which favourite portions appear to have been The Book of Wisdom and the Epistle of James. But Paul's Epistles attracted him most of all, and he projected and completed a commentary on these epistles. He chose the Vulgate text of Jerome, which had been issued in 383 and 384, as the basis of his comments, and published the text and commentary at Rome, the great book-mart of the world, somewhat before the year 410.

From Rome the commentary circulated over the Western world, and was quoted not long after publication by two contemporaries, Augustine and Marius Mercator. It will be convenient at this point to collect references to, and quotations from, the commentary to be

[1] *Hermathena* for 1904.

found in the works of these two authors. Augustine tells us that the work consisted of 'very brief expositions'[1]; Mercator that he aimed at explaining individual words or thoughts of the apostle.[2] The former makes the following quotations —

hi autem qui contra traducem peccati sunt, ita illam inpugnare nituntur: si Adae, inquiunt, peccatum etiam non peccantibus nocuit, ergo et Christi iustitia etiam non credentibus prodest, quia similiter, immo et magis dicit per unum saluari quam per unum ante perierunt (*De peccatorum meritis*, III ii 2 (*partim bis*), iii 5, *De Peccato Originali*, xxi 24)

deinde aiunt, sed si baptismus mundat antiquum illud delictum, qui de duobus baptizatis nati fuerint, debent hoc carere peccato non enim potuerunt ad posteros transmittere quod ipsi minime habuerunt illud quoque accedit quia si anima non est ex traduce, sed sola caro, ipsa tantum habet traducem peccati, et ipsa sola poenam meretur iniustum esse dicentes, ut hodie nata anima non ex massa Adae tam antiquum peccatum portet alienum. dicunt etiam nulla ratione concedi, ut deus qui propria peccata remittit imputet aliena (ibid III. iii 5; cf vii 15, 16; ix. 18)

[non uolentis neque currentis, sed miserentis est dei] (Rom ix 16.)

non ex persona Pauli (adserit) dictum; sed eum uoce interrogantis et redarguentis usum fuisse, cum hoc diceret, tamquam hoc dici utique non deberet (*De Gestis Pelagii*, xvi 39).

The latter cites the following passages (on Rom. v. 12 ff.) —

[per unum hominem peccatum intrauit in mundum, et per peccatum mors]

exemplo seu imagine usus est, quia, sicut, cum non esset peccatum, per Adam subintrauit, sic et, cum non remansisset iustitia apud aliquem, uita per Christum reparata est (*Common* ii 2).

[et in omnes homines mors pertransiit]

cum sic qui peccant similiter et moriuntur,—neque enim aut in Abraham aut in Isaac aut in Iacob mors pertransiit, de quibus dominus ait· *hunc* [Bal *hi*] *omnes uiuunt* [Luc xx 38] Hic autem propterea dicit omnes mortuos, quoniam multitudine peccatorum non excipiuntur pauci iusti, sicut et ibi inquit. *non est qui faciat bonitatem, non est usque ad unum* (Ps liii. 2, 4). et iterum illud inquit *omnis homo mendax* (Ps cxv. 11), aut certe in illos omnes pertransiit [*Bal.* inquit], qui humano ritu, non caelesti, sunt conuersati (*Common.* ii 3).

[sed regnauit mors ab Adam usque ad Moysen, etiam in eos qui non praeuaricauerunt (*v. l* peccauerunt) in similitudinem praeuaricationis Adae]

siue cum non esset, qui inter iustum et iniustum discerneret, putabat mors se omnium dominari, siue in eos qui mandatum tamquam Adam praeuaricati sunt, hoc est de filiis Noe, quibus praeceptum est ut animam in sanguine non manducarent, et de filiis Abraham, quibus circumcisio mandata est, sed [*Bal add* et] in eos qui praeter mandatum legem contempserant naturalem (*Common.* ii. 4)

[qui est forma futuri]

quoniam, sicut Adam praeter coitum a deo formatus est, sic et Christus a (*Bal.* ex) uirgine, fabricante spiritu sancto, processit; siue, sicut quidam dicunt, forma a contrario, hoc est [*Bal. add* ut], sicut ille caput peccati, sic etiam [*Bal. om* etiam] iste caput iustitiae est (*Common.* ii. 5).

[1] 'Expositiones breuissimas,' Aug *De pecc. mer.* III i § 1.

[2] 'Explanare . . singula apostoli uerba uel sensus,' Mercator, *Common.* c. 2. 1 (Migne, *P. L.* xlviii. 83)

[sed non, sicut delictum, ita et donum]
ne in forma aequalitas putaretur (*Common* ii 6).
[si enim *in unius praevaricatione multi mortui sunt, multo magis donum* et gratia dei per unum hominem Christum in multos abundauit]
plus ualuit, inquit apostolus, gratia in uiuificando quam peccatum in occidendo, quia Adam non se solum sed et suos posteros interfecit, Christus uero et eos qui tunc erant in corpore et eos qui postea futuri erant liberauit (*Common* ii 7).
hi autem, qui contra traducem peccati sentiunt, acriter (*v l* aliter) eos qui defendunt traducem impugnare conantur. 'si peccatum,' inquiunt, 'Adae etiam non peccantibus nocuit, ergo et Christi iustitia non credentibus prodest, quoniam similiter, immo plus dicit apostolus per unum liberari quam per unum ante perierat' deinde dicunt 'si baptismus mundat antiquum illud ueternosumque peccatum, qui de duobus baptizatis nati fuerint debent hoc carere peccato, non enim poterunt ad posteros transmittere quod ipsi minime habuerint [*Bal.* habuerunt].' In (*v l* ita) hoc addunt 'quoniam (*v. l* quia) si anima non est ex traduce—sicut nec est—, sed sola caro habet traducem peccati, sola et poenam meretur. iniustum est enim ut hodie nata anima non ex massa Adae tam antiquum peccatum portet alienum, quin et rationabile est ut deus, qui propria peccata dimittit, non [*v l* unum] imputet alienum' (*Common.* ii 9)
sed imitatione, quia prior ille in genere humano peccauit, et illum reum et obnoxium fieri, qui hunc propria uoluntate non nascendo sed peccando fuerit imitatus (*Lib. Subnot.* praef 3)

Possibly there are other quotations lurking in the works of these two authors, but these appear to be all that are declared to be taken from the commentary. It will be observed that, where both authors quote the same passages, the texts do not verbally agree. This is sufficiently explained by the fact that Mercator first wrote his work in Greek and then translated it from Greek into Latin.[1]

The so-called Praedestinatus, a work attributed to the middle of the fifth century, makes one quotation from the commentary.[2] It is rather a paraphrase, however, than a quotation, as comparison with the first and second quotations in Augustine and the seventh in Mercator shows. It reads as follows:—

hi qui contra traducem ueniunt, ita illam[3] impugnare nituntur: 'si Adae peccatum etiam non peccantibus obfuit, ergo et Christi gratia non credentibus prodest' addunt etiam hoc · si baptismus tollit originale illud peccatum, de duobus baptizatis nati debent hoc carere peccato quo modo enim mittunt ad posteros quod ipsi in se minime habuerunt?

It is not necessary to suppose that Praedestinatus actually had the commentary in his hands. He may quite well have derived the extract from some other anti-Pelagian treatise, if not from Augustine or Marius Mercator.

[1] Garnier's preface in Migne, *P. L.* xlviii. 13–14; Zimmer, *Pelagius in Irland*, p 449.
[2] Bruckner, *Quellen Gesch. Pelag. Str.* (Tubingen, 1906), p. 55.
[3] illum (Bruckner).

These appear to be the only contemporary or nearly contemporary quotations made from the commentary, but they are sufficient as a means of identification. If any commentary survives in which all of these appear, it is to be regarded as a form of the commentary of Pelagius. Further quotations could be added from works of the seventh, ninth, and tenth centuries, but an enumeration of these may be deferred at this stage. There is, however, a passage in a sixth-century work which must be quoted now, as it has an important bearing on our problem.

Cassiodorus in the eighth chapter of his *Training in Sacred and Secular Literature*, written about the middle of the sixth century, mentions those complete commentaries on the epistles of Paul which existed in his seminary library at Vivarium in South Italy. Let me quote two sections of this chapter.—

> In epistulis tredecim sancti Pauli adnotationes conscriptas in ipso initio meae lectionis inueni, quae in cunctorum manibus ita celebres habebantur, ut eas a sancto Gelasio papa urbis Romae doctissimi uiri studio dicerent fuisse conscriptas. Quod solent facere qui res uitiosas cupiunt gloriosi nominis auctoritate defendere; sed nobis ex praecedentibus lectionibus diligenti retractatione patuerunt subtilissimas quidem esse ac breuissimas dictiones, sed Pelagiani erroris uenena illic esse seminata. Et ut procul a uobis fieret error hereticus, epistulam[1] ad Romanos qua potui curiositate purgaui, reliquas in chartaceo codice conscriptas uobis emendandas reliqui. Quod facile subiacebit, quando praecedenti exemplo audacior redditur sequentis imitatio.

After mention of another commentary, which by common consent is our *Ambrosiaster*, and some further notes on the Epistle to the Hebrews and the Catholic Epistles, he proceeds.—

> Tertium uero codicem repperi epistularum sancti Pauli, qui a nonnullis beati Hieronymi adnotationes breuissimas dicitur continere, quem uobis pariter Christo largiente dereliqui.

The first of these two passages means that he possessed an anonymous commentary of such repute that it was considered to be by Pope Gelasius. On examination he found that this could not be so, as, though the notes were acute and brief, they showed here and there traces of the Pelagian heresy. He therefore worked over the commentary on the Epistle to the Romans, and eradicated all traces of this heresy, leaving it to his pupils to do the same with the rest of the commentaries. The second passage is quite clear. He found a commentary which some said consisted of brief notes by St. Jerome; this also he left to his pupils. From the place and manner in which he mentions this commentary it appears that he had paid little or no attention to it.

[1] *Cod. Sang.* 199 (saec. x) has *primam* before *epistulam*.

We must now pass over a period of nearly a thousand years, and endeavour as far as possible to trace the history of the attempts which have been made since the invention of printing to recover the original commentary of Pelagius, or, in other words, to enumerate those publications which, whether professedly or not, have contributed to a solution of this difficult question. We conclude with an account of the progress I have been enabled to make in dependence partly on these and partly on fresh material, which has become accessible to me.

In the second decade of the sixteenth century there appeared at Frankfurt and Leipzig an edition of the works of St. Jerome. The ninth volume, which was published in 1516, contains a commentary on the thirteen epistles of St. Paul. This commentary the editor, Bruno Amorbach, had found, attributed to Jerome, in a very old MS. in Merovingian characters, which in any case would have been difficult to decipher, and in this case were especially so, as they had in many places almost vanished out of sight through age He copied out this MS as far as he could, and, where he was not content to leave nonsense, rewrote the commentary himself. The manner of his working and the neglect of all succeeding editors, who have been content practically to reprint his text, have had a confusing effect on investigation into the history of the commentary, and scholars who have worked at the problem have good cause to bear a grudge to their memory. I shall have to illustrate this later: meantime, we are more concerned with opinions about the authorship of this commentary. Its whole style is utterly alien to Jerome's, and genuine commentaries by him on four of these epistles are extant. Amorbach rejected Jerome's authorship distinctly, in spite of a letter to a certain Heliodorus which forms a sort of preface to the commentary, and in this rejection almost all have followed him. He was disposed to attribute the authorship to some mediaeval glosser. Succeeding scholars who took an interest in the question made various guesses, more or less sensible. Some attributed it to Primasius, some to Sedulius; but Garnier says that these opinions had been given up by 1673.[1] Catarin, quoted by Sixtus Senensis,[2] judged Pelagius to be the author on account of the doctrine in it that predestination depends on merits, which God has foreseen by His prescience. But, as was pointed out, this reason proves nothing, because that view was prevalent in the Church before Pelagius's day, and to hold it does not

[1] Cf Migne, *P L.* xlviii. 83 B

[2] *Bibliotheca Sancta* (Colon ,1626), pp. 289f., 309, quoted by Riggenbach, *Unbeachtet gebliebene Fragmente des Pelagius-Kommentars*, p. 14 (for which see below).

constitute one a Pelagian.[1] Bellarmine (in 1613)[2] proved that some extracts quoted by Augustine from Pelagius were to be found in this commentary, and argued that the pseudo-Jerome commentary was really that by Pelagius.[3] Labbe rightly objected that there were quotations in Augustine from Pelagius that were not to be found in this commentary. Garnier[4], and after him Simon, perhaps the most masterly critic who has ever dealt with patristic commentaries, got over this difficulty by supposing that our pseudo-Jerome is Pelagius after he had been revised by Cassiodorus, as described in the extract just given. Simon added that Sedulius, Primasius[5], Haymo, and some others had copied the best part of his commentary in making their own commentaries, that he commonly follows the Vulgate text, and adopts ordinarily the opinions of the Greek Fathers, principally those of Chrysostom. The view of Garnier as to the origin of the pseudo-Jerome commentary ruled for two centuries, though he felt that the continued presence in it of passages of Pelagian import was a real difficulty.

To Professor Heinrich Zimmer, the Berlin expert in Celtic languages, we owe the recovery of the whole question from the state of stagnation into which it had fallen. Klasen in 1885 had disputed Pelagius's authorship of the pseudo-Jerome commentary,[6] but without obtaining any following. Zimmer in the course of his study of early Irish history found a large number of references to, and professed quotations from, Pelagius in Latin MSS. of Irish provenance, and, on the eve of publishing his material, had the good fortune to discover at St. Gall an anonymous commentary in MS., which appeared to be the original Pelagius.[7] This MS. he collated with the published pseudo-Jerome, and in 1901 the combined results of his investigations were published at Berlin in a volume to which he gave the title *Pelagius in Irland* It is necessary for us to show in some detail what Zimmer achieved,

[1] For this and what follows I am indebted to Richard Simon, *Histoire Critique des principaux Commentateurs du Nouveau Testament*, &c (Rotterdam, 1693), chap xvi, p 236 ff.

[2] *De Scriptoribus Ecclesiasticis liber unus* (Rome, &c , 1613) = Opera, tom vii. (Colon , 1617), p 73 B–D

[3] Cf. Garnier, l c.

[4] Migne, *P L.* xlviii 588 D

[5] See also Simon, p 336 ff (Primasius), p 380 (Sedulius) For Primasius's connexion see also an earlier reference in the Benedictine Augustine tom. x (Paris, 1690) praef. : '*Primasium ex hoc commentario* (i. e ps -Hier) *non pauca desumsisse, fonte interim, unde illa duceret, non indicato, ab eruditis observatum est.*'

[6] *Theol. Quartalschr* lxvii 244-317, 531–77.

[7] No 73 of the *Stiftsbibliothek* (saec ix)

reserving criticism of his results for the concluding portion of this paper

He points out that the *Book of Armagh*, the well-known biblical MS. of Trinity College, Dublin (No. 52), of the early ninth century, contains a prologue to the epistles of St Paul, a prologue to the Epistle to the Romans, and a set of arguments to all the epistles, one for each, all of them attributed to Pelagius. He draws attention also to a MS. of the seventh or eighth century in Wurzburg (M th. f. 12). This is a MS. of the epistles of Paul in Latin, which is heavily glossed. Most of the glosses, actually 949,[1] are stamped *pl*, and one of them coincides with a comment quoted by Marius Mercator.[2] The majority of these, actually 840, are to be found in our pseudo-Jerome commentary, but some, actually 109, are not to be found there. There are also, however, numerous glosses, actually 348, with no author's name attached, which are to be found in our pseudo Jerome commentary The total reaches altogether 1311 [3] Zimmer has published a list of the glosses which are connected with the Pelagian commentary, and has added convenient symbols, first, to show when the gloss, though denominated *pl*, is not to be found in our pseudo-Jerome, and, second, when, though anonymous, it is to be found there. He has also discovered on examination that some of the glosses, labelled *pl*, are not really by Pelagius, but are derived from the commentary which was printed as a work of Primasius in 1537.[4] The MS. is really a copy of an earlier MS., glosses and all, and the original compiler appears to have possessed an unmutilated Pelagius, since many passages, which we cannot find in pseudo-Jerome, are to be found either in pseudo-Primasius or in Sedulius Scottus, both of whom used Pelagius very greatly.[5] Some of these passages are to be found in both of those compilers.

From his study of the anonymous glosses in this MS., Zimmer has found that the so-called Primasius commentary was sometimes used by the compiler, though not cited by any name. This commentary Haussleiter proved to have no connexion with Primasius, and Zimmer claims to be the first to point out that the principal source used in it is the Pelagius commentary [6]; but, as we have seen, this discovery is older than the end of the seventeenth

[1] Zimmer, *Pelagius in Irland*, p. 112, for statistics.
[2] On Rom. v 15 (see above), Zimmer, p 40.
[3] Zimmer, p. 132.
[4] Ibid. pp. 45, 68, 129.
[5] As Simon (see above, p. 415) had pointed out
[6] His words are '—' was bisher noch nirgends erkannt wurde' (p. 122)

century, though the Primasian authorship was not then doubted. Zimmer, however, deserves all credit for the detailed manner in which he has dealt with the question. He shows *inter alia* that the borrowing is much easier to detect in the later epistles than in the Epistle to the Romans, and the importance of this will appear later. His conclusion with regard to the commentary as a whole, that it is an anonymous anti-Pelagian revision of the Pelagius commentary, cannot be disputed.[1] He also allows that in the Wurzburg codex a portion of the anonymous glosses, which ultimately belong to Pelagius, may have come to it through pseudo-Primasius, shows that sometimes there are errors in the citations,[2] and, further, proves that the compiler of the glosses sometimes abridged his sources.[3]

As to the date and place of origin of the pseudo-Primasius commentary Zimmer argues that Pelagianism on the Continent ended with the decrees of the Synods of Orange and Valence in 529, and that this date provides a *terminus ad quem* for a commentary containing polemics against the Pelagians. He seeks further to draw from the allusion 'fuerunt Hunni usque ad Attilam'[4] an argument that the compiler could not have lived long after the death of Attila (454), and that the last third of the fifth century is the latest possible date for the commentary. He thinks it came into being in South Gaul or North Italy in connexion with the semi-Pelagian controversies, and identifies it with the commentary which Cassiodorus knew as attributed by some to Pope Gelasius and which he himself afterwards revised. We shall see later that this view must be given up, but there is no need to disagree with Zimmer as to the date when the pseudo-Primasius commentary came to Ireland, namely in 641.[5] He further says this commentary is used in the Haymo-Remigius commentary of the ninth century.[6]

Besides the Wurzburg codex, Zimmer has drawn attention to two other MSS. of the epistles in Latin, which provide similar material, though much inferior in bulk. They are Vienna MS. 1247, written in 1079, and Berne MS. A 73, of the thirteenth century. The former contains 203 direct citations from Pelagius. of these 167 are to be found in pseudo-Jerome, while 36 are there lacking. In 57 places also, where no name is attached, words are given which appear in our pseudo-Jerome. Both MSS. give the same prologue to the epistles as is given by the *Book of Armagh*, and under Pelagius's name. The total number of independent glosses

[1] Cf p. 123.
[2] pp. 127 ff., 133
[3] p 133.
[4] Migne, *P. L.* lxviii. 441 B, Zimmer, p. 135.
[5] Zimmer, p. 137.
[6] Ibid pp. 135, 162

in the Wurzburg and Vienna MSS together reaches 1535.[1] Zimmer also refers to citations from Pelagius in the Irish Canons of the end of the seventh or beginning of the eighth century.[2]

He next points out that there is evidence for the existence in the ninth and tenth centuries of MSS. of Pelagius's commentary in three libraries, all of them connected with the Irish mission to the Continent, at St. Gall, Lorsch, and St Ricquier.[3] Of these the St. Gall MS. has certainly survived in the anonymous No. 73, and to it we return presently.

Meantime Zimmer has shown quite clearly, in opposition to the ruling view of Garnier and Simon, that the pseudo-Jerome commentary shows no prevailing anti-Pelagian tendency,[4] and that it cannot therefore be the revision of Cassiodorus. In this respect pseudo-Jerome is to be contrasted with pseudo-Primasius, Sedulius, the Wurzburg and Vienna glosses, to mention the other commentaries which employ Pelagius throughout. He proceeds to show by copious illustrations that frequently all other authorities are right against pseudo-Jerome, and suggests—quite rightly, as my researches show — that many of the errors of that form will vanish when MSS. of it are collated.[5] One of the best parts of Zimmer's book is his proof that Pelagius wrote no commentary on the Epistle to the Hebrews, though he regarded it as Pauline.[6] Fresh arguments are now at my disposal to confirm his conclusion.

Zimmer identifies the pseudo-Jerome commentary with that mentioned by Cassiodorus as containing short notes which were ascribed by some to Jerome. In this he must be right, as there could hardly be at that date two short commentaries on the epistles of Paul, both of them attributed to Jerome. The second commentary mentioned by Cassiodorus he identifies with Ambrosiaster; in this also he is no doubt right. The first of the three anonymous commentaries mentioned by Cassiodorus, which Garnier and others have believed to be the unmutilated commentary of Pelagius, Zimmer considers to be our pseudo-Primasius. His skilful arguments in support of the last conclusion need not be recapitulated, as we shall see later conclusive proof that he is wrong. With regard to the revision by Cassiodorus and his pupils, he is of opinion that it has perished.

[1] Zimmer, p. 155. [2] Ibid p. 162, &c. [3] p. 157.
[4] Zimmer, p 164 ff. [5] Ibid pp. 169-75
[6] Ibid. p. 178 ff. In this connexion he gives Haussleiter the credit of observing that the commentary on Hebrews in ps.-Primasius is identical with that in Haymo-Remigius; but Simon had observed this two centuries before (*Hist. des Comm.* p 338).

Before referring to Zimmer's great discovery, I must say a word or two about his view of the manner of production of the pseudo-Jerome commentary. He considers that some one in the first half of the fifth century, before the suppression of Pelagianism, wrote out notes from the Pelagius commentary into a copy of the epistles of Paul in Latin, that these notes fell into the hands of a man who knew nothing of Pelagius and was no heretic-hunter, about the end of the fifth or the beginning of the sixth century, and that this man ascribed them to Jerome and edited them as his.

St. Gall MS. 73, of the ninth century, contains a commentary on the epistles of Paul which is anonymous[1] Its special characteristics are illustrated in great detail by its discoverer, who compares it with pseudo-Jerome. It has some distinct differences from the form attributed to Jerome. For example, it gives a long quotation in its proper place which was already known from Augustine and Mercator,[2] but is wanting in pseudo-Jerome, and in text it agrees with Augustine as against Mercator In the commentary on First Corinthians it frequently drops one of the two explanations which pseudo-Jerome frequently offers for one verse, and this Zimmer attributes to the editing of some Irish scholar. The St. Gall MS. is not a pure Pelagius. It is heavily interpolated from known sources, especially in the commentaries on Ephesians, Titus, and Philemon, where passages from the genuine commentaries of Jerome on those epistles are interwoven with the Pelagian original, without acknowledgement. There are also citations from Augustine and Gregory. These additions Zimmer regards not as specialities of the Irish recension of Pelagius, but as peculiar to the St. Gall MS. or its original. The Irish appear from early times to have added notes to their copies of Pelagius, and thus in Irish circles passages came to rank as Pelagius which were not really by him. Zimmer suggests that Sedulius and the Wurzburg and Vienna MSS. are thus interpolated.[3] After sketching the only plan by which an edition of Pelagius can now be made, Zimmer presents his readers with a collation of the St. Gall MS. made with the text of pseudo-Jerome. By this publication he did a great service to the study both of pseudo-Jerome and of Pelagius, as he at once removed a large number of the corruptions of the printed text of the former.

Zimmer's services to the study were recognized in a valuable review by C. H. Turner[4], who joined issue with him on one point

[1] Zimmer, pp. 219–79. [2] See pp. 411, 412 above

[3] See pp 268–71.

[4] *Journ. Theol. Stud.* Oct 1902 (pp 132–41)

only, namely his view as to the pseudo-Primasius commentary. This commentary, as we have seen, Zimmer seeks to identify with the first commentary mentioned by Cassiodorus, from which Cassiodorus says he afterwards removed the Pelagian characteristics. Turner objects that the pseudo-Primasius is 'definitely and consciously anti-Pelagian throughout,' and that it is in the commentary on Romans that Pelagius has been specially re-written. He proceeds 'Pseudo-Primasius is based on Pelagius: if Garnier and the scholars who have followed him are right, Cassiodorus revised Pelagius. Pseudo-Primasius is an anti-Pelagian edition of Pelagius: so was that of Cassiodorus. Pseudo-Primasius has revised his original more on the doctrinal than on the linguistic side, more in the Epistle to the Romans than in the other epistles[1]; Cassiodorus, "in order to remove far the error of heresy," purged the Epistle to the Romans with all the *curiositas* that he could, leaving the rest of the revision to his pupils, whose work will doubtless have been much more perfunctory than their master's. Pseudo-Primasius adds to the genuine Pelagius on the thirteen epistles a commentary on the Hebrews, which depends on Chrysostom's Homilies[2]: but it was Cassiodorus who, in order to provide a commentary on an epistle which both Ambrosiaster and Pelagius had neglected, caused a certain Mutianus to translate these Homilies of Chrysostom into Latin.[3] The correspondence appears to be exact: pseudo-Primasius is surely nothing else than the new and standard commentary on the completed Pauline epistles evolved out of Pelagius and Chrysostom by Cassiodorus and his monks of Vivarium. The hypothesis seems to me to be at any rate worthy of further consideration.' Thus far Turner. Haussleiter in his article 'Primasius' in Herzog-Hauck's *Real-Encyclopädie*, vol. 16 (1905), took no notice of the suggestion.

Though Zimmer had very fully reviewed the mediaeval authorities which made use of Pelagius, there was one which escaped him. Zmaragdus, abbot of St. Mihiel in N. E. France at the end of the eighth century and the beginning of the ninth, had compiled out of the writings of some twenty authors a commentary on the lessons read in Church, and indicated his borrowings by symbols in the margins. This commentary was published at Strasbourg in 1536, and reprinted in Migne's *Latin Patrology*, vol. cii, in 1851. In this reprint Dom Pitra had called attention to the fact that Pelagius was one of the authors used and named by Zmaragdus, and Primasius another, and had brought into clear relief some instances of disagree-

[1] Zimmer, p. 122. [2] Ibid. pp. 183-95

[3] Ibid p. 202.

ment between his quotations and the pseudo-Jerome. Pitra's work had been overlooked by Zimmer, and the connexion of Zmaragdus with Pelagius was rediscovered about the same time by Riggenbach, Hellmann, Morin, and myself.

Riggenbach, in 1905, published an article calling attention to the value of Zmaragdus in this connexion.[1] He was able to identify the original editor of Zmaragdus as Caspar Hedio. He very acutely observed, from Pitra's collation of the symbols in a Boulogne MS. of Zmaragdus, that the symbol P̄ was used by Zmaragdus only in commenting on the epistles of Paul and P̄R̄Ī or P̄R̄ only in comments on the Apocalypse, and that P̄ therefore means Pelagius, P̄R̄Ī or P̄R̄ Primasius. He concludes that Zmaragdus knew no Primasius on the epistles, and that the first editor had resolved the symbol P̄ wrongly. Riggenbach's paper, though brief, is also in other respects extremely suggestive. He shows that Zmaragdus and pseudo-Primasius agree on occasion in providing a text of Pelagius, which is different from and obviously better than that provided by either pseudo-Jerome or the St. Gall MS., and he conjectures that the two last authorities represent a definite recension of the original commentary. He also draws up a very useful list of the quotations in Zmaragdus labelled P̄, as far as he could learn them from Pitra's reports. He has examined some attributions to 'Primas.' in the printed text, and has rejected them on internal evidence. On the whole he is disposed to regard pseudo-Jerome as an abridged form of the original Pelagius. He adds a new glossed MS. to the list provided by Zimmer, namely Berlin Codex Phillippicus 1650 (saec. x–xi), which introduces some glosses with the letters 'Pel' this MS I had also noted.

Hellmann in his *Sedulius Scottus*, published early this year (1906), has given careful study to the use of Pelagius made by Sedulius in his own commentary. The value of his work is heightened by the fact that he has examined the MSS. of Sedulius as well as the printed text. He overthrows Zimmer's contention that the St. Gall MS. with Sedulius and the Wurzburg and Vienna MSS. represent the Irish tradition of Pelagius, as against the Continental tradition represented by pseudo-Jerome and pseudo-Primasius, and shows on the contrary that there is a real relationship between the St. Gall MS. and pseudo-Jerome as against all other authorities for Pelagius. This relationship shows itself in community of corruption, in cases where the right text can be elicited from pseudo-Primasius, Zmarag-

[1] *Unbeachtet gebliebene Fragmente des Pelagius-Kommentars zu den Paulinischen Briefen* (Beitrage zur Forderung christlicher Theologie, ix 1 Gutersloh, 1905). Prof. John E. B Mayor first drew my attention to this pamphlet.

dus, and Sedulius Scottus. Hellmann has handled much material of varying quality with great skill, and has made many suggestive remarks on his difficult subject. He has shown also that Isidore used Pelagius in one form or another,[1] that several glossed MSS of St. Paul's Epistles contain Pelagian matter (Clm 9545 (saec. x),[2] 18530 (saec. xi–xii), Berl. Theol. fol. 481, Einsiedeln 16, Karlsruhe Aug. lxxxiii[3]), and that the so-called Pelagian prologues occur in the oldest Vulgate MSS. we possess.

I have now brought down the history of the investigation of the Pelagius commentary to the point at which my own researches begin. Evidence of its use has been found in different quarters, but the reports of various authorities were conflicting, and the commentary itself was still to seek. I began by ransacking catalogues of MSS., and noted such as were likely to be helpful in this investigation, and published my result in the *Journal of Theological Studies* for July, 1906. Having received generous help from the Hort Fund at Cambridge and the Revision Surplus Fund at Oxford, I spent nearly the whole Long Vacation at close quarters with MSS. at Paris, Berlin, Karlsruhe, Zurich, Einsiedeln, and St. Gall, and of the results which I appear to have attained I would now speak.

We must first postulate that the MSS of Pelagius's commentary were anonymous. All the early evidence points this way, and the later does not contradict it. Augustine, in 417 (*De Gestis Pelagii*, xvi. 39), speaks of 'certain expositions of the Epistle of Paul to the Romans, which *are said to be* by Pelagius himself': 'said to be,' because they bore no name. Again, if they had not been anonymous, they could not, even if modified, have been put out under the name of Jerome. Further, no one could have mistaken them for the work of Gelasius, nor would Cassiodorus have been so indefinite about the authorship, unless the commentaries had borne no name. Modern evidence points the same way. No MS. of the commentaries has survived bearing Pelagius's name. It is true that Irish and other authorities affix the name to a large number of extracts, but there is no reason to suppose that their MSS. bore the name. It became clearer as investigations proceeded that *any commentary could be called Pelagius, which was based on the original commentary of that author*, with the possible exception of the pseudo-Jerome. There were various reasons why the name of the author should not be affixed; and the ultimate authorship of the commentaries would be known to all persons of learning, into whose hands they might fall, to all in fact who took an interest in the earlier

[1] pp. 152, 184. [2] pp. 186–90. [3] p. xv.

literature of the Church. It is this anonymity of Pelagius's commentaries, in whatsoever form they were, which has caused the great confusion in the form of the citations. If this principle be accepted, it helps to elucidate the whole history of the commentary.

MS. No. CXIX of the Reichenau collection in the Grand-Ducal Library at Karlsruhe was described as an anonymous copy of the pseudo-Primasius commentary in the catalogue of the MSS. in the library, which until three months ago was unpublished.[1] The entry was copied by Mr. C. H. Turner early last year and communicated to me by him. Early in the present year I applied to the librarian for a description of the contents of the MS., which he courteously granted me. I saw at once that the title given by him was wrong, and wrote to him to the effect that it was either an anonymous pseudo-Jerome or a pure Pelagius, more probably the latter. I have since collated the MS. entire,[2] and believe it to be a pure Pelagius, perhaps the only copy in existence.

The MS. was written in the ninth century, probably the earlier half of that century, at Reichenau, as Dr. Holder knows from the script. Five scribes took part in the writing: the first wrote ff. 3–33 (*gentium plenitudo ut*), the second ff. 34–57 b (*pater filius ad ettate*), the third and the most beautiful of all, showing the Reichenau hand at its best, ff. 59 va–100 a (*et ideo ipse paries ini-*), the fourth ff. 100 b–106 a, l. 4 (*uere est in uobis*), the fifth, obviously Irish,[3] a careful copyist enough, but he has made as many mistakes as all the others put together, ff. 106, l. 4—the end (f. 148 b). The correctness of the orthography and the extreme purity of the text, which excels that of the St. Gall MS. as much as the latter excels the published pseudo-Jerome, would argue a high antiquity for the original of the Reichenau MS. This general impression is confirmed on closer study. The long form *idololatria* is found almost without exception (e. g. 676, 40[4]), a very rare thing in MSS. of the ninth century. The contraction *dom̄* for cases of *dominus* occurs five times (733, 28, 734, 53, 739, 21; 752, 18; 818, 8), and this must be taken straight from the original in front of the scribe. *Istrahel* occurs twice (687, 53, and 690, 23), and must have the same origin, being the most ancient of all Latin spellings of that word. Above all, the letter *n̄* occurs as

[1] Now published (with the entry corrected at my suggestion): *Die Reichenauer Handschriften beschrieben und erläutert*, von Alfred Holder. Bd. i (Leipzig, 1906), p. 303 f.

[2] The collation was completed Aug. 14, 1906.

[3] His capitals P, B, and S betray him: there are many other indications also.

[4] These are the columns and lines of the pseudo-Jerome in Migne, *P. L.* xxx (later issue).

a contraction for oblique cases of *noster* three times, twice for *nostri* (868, 11; 932, 41) and once for *nostrum* (739, 2), and Traube has shown that this was not used after the middle of the sixth century [1] It may be regarded as certain, then, that the original of our MS. was not later than the middle of the sixth century, and very probable that it belonged to the fifth century, the very century in which Pelagius wrote. It is improbable that there is more than one medium between our MS. and the copies which the author put out at the first.

The MS. is, as I have said, anonymous, and contains the *Primum quaeritur quare post euangelia* prologue, which is attributed to Pelagius in the *Book of Armagh*,[2] under the title *Argumentum omnium epistularum*; this is followed by the *prologus epistulae ad romanos*, beginning with the words *Romani ex Iudaeis gentilibusque*, which is also attributed to Pelagius in the *Book of Armagh*.[3] After this the commentary on Romans begins at once, the short arguments to all the epistles which the *Book of Armagh* gives as also by Pelagius being entirely absent at this point.[4] After the commentary on Romans comes the commentary on First Corinthians without argument. then the commentary on Second Corinthians, also without argument. Then follow Galatians, Ephesians, Philippians, First and Second Thessalonians, Colossians (in this, the regular, order in Pelagian MSS), First and Second Timothy, Titus and Philemon, each preceded by an 'argumentum.' These arguments are sometimes shorter, sometimes longer, than the corresponding arguments in the *Book of Armagh* or the pseudo-Primasius commentary, but in most cases the relationship between all three is perfectly clear. They follow the present paper in an Appendix.

There are several reasons for regarding this MS. as a copy of the genuine Pelagius commentary. We have noted its very early date. It is the shortest of all commentaries which have any claim to be considered Pelagius: and expansions in such cases are much commoner than abridgements. It is uniform throughout: it has no additional comments introduced by *item*, like the pseudo-Jerome in the first four epistles, but it has plenty of alternative explanations, these being almost always introduced by *siue*, once or twice by *aliter*. It is without interpolation of any sort. It contains all the quotations in Augustine and Marius Mercator, which were given at the beginning of this paper. Finally, it has the text in by far the purest form, which explains the corruptions and variations of pseudo-Jerome,

[1] *Sitz.-Ber Bayer Akad.*, 1900, i. p. 500.
[2] See Zimmer, p 26 ff. for the text.
[3] Zimmer, p. 29 ff. for the text.
[4] Ibid. p. 31 ff. for the text.

pseudo-Primasius and other authorities. It is a norm by which all other adaptations of the commentary must be judged.

The exegetical merits of the commentary even in its imperfect form were sufficiently clear to Simon: these do not concern us here: it is the literary quality of our author that I desire to appraise. He has his mannerisms, such as a fondness for *commoneo*, *nitor* (with infinitive), *corrigo* (intransitive), *rationem reddo*, *profectus* (in the sense 'moral progress'), the adverb *uere*, *indebitus* and *indebite*, *moralis*; for such phrases as *uult ostendere* (*ostendere uult*), (*simul*) (*et*) *notandum* (or *adtendendum*, or *considerandum*) *quod* (or *quia*) in introducing his notes; also for the ablative of the gerund. He is somewhat given to repeating himself: thus he is fond of referring to Ananias and Sapphira, Simon Magus, the appointment of Barnabas and Saul, and praise as an incentive to progress. There are very few solecisms. Such are:—*adiuuamus coli dei agrum* (754, 50), *ad inquiete ambulantes* (916, 30), and three examples of a construction curiously like English, which ought not perhaps to be called a solecism, but a development:—*habent unde gloriari* (685, 35), *habeant quod timere* (732, 31), *auctoritatem legis non habet quam proferre* (780, 31). He appears to use only two words which are not elsewhere found:—*propitiatus* (subst.) (824, 59) and *inimpetrabilis* (838, 23). There appear to be no traces of knowledge of classical literature in this commentary, though in another, much smaller, work, the *Letter to Demetrias*, there is at least one reminiscence of Juvenal.[1] The commentary is written with a simplicity of style which no writer in that age has surpassed. It raises the question where the author obtained his rhetorical training.

The text on which the commentary is based is the Vulgate, as was recognized long ago by Simon in the case of the pseudo-Jerome, and by Zahn in the case of the St. Gall MS.[2] It is obvious, however, that if I am right about this Karlsruhe MS., that it is an almost correct copy of the commentary of Pelagius, we are provided by it with an authority of the highest value for constituting the Vulgate text of Paul's Epistles. Perhaps it would not be wrong to say that we are thereby provided with the very highest authority which exists. The oldest MS. of the epistles in the Vulgate text which survives is the *Codex Fuldensis* of date about 541–546. But here is a MS. which carries us back a hundred and fifty years behind that, to before

[1] *uacuus uiator et nudus non timet latronis insidias*, c. 25 (Migne, *P. L.* xxx. 40 D): cf. Iuu. x. 22 *cantabit uacuus coram latrone uiator*: a 'saecularis auctor' (Cicero?) is quoted c. 11 (Migne, *P. L.* xxx. 28 B).

[2] In the introduction to his commentary on Galatians (Leipzig, 1904).

410 A.D., to within thirty years of the original publication of the Vulgate itself. It provides a complete Vulgate text, except for the omission of some salutations, &c., near the end of some of the epistles. The evidence shows clearly that Pelagius omitted some of these, as having a purely historical interest and not ministering to edification.[1] The presence of a commentary with a text is a valuable means for the purification of such a text, if scribes have tampered with it, for the commentary often shows what the text must have been. But such a protection is hardly necessary in the present case. I have carefully compared the text with the valuable *Fuldensis* and *Amiatinus* (of date about 700) for the whole of Romans and about half of Corinthians, and find a close agreement between all three against the Sixto-Clementine readings. Sometimes Pelagius supports *Amiatinus* against *Fuldensis*, sometimes *Fuldensis* against *Amiatinus*, more often the former than the latter. This would seem to indicate that *Amiatinus* more nearly represents the original Vulgate in the epistles than *Fuldensis* does.

The study of the pseudo-Jerome has suffered very greatly since the invention of printing, as we have seen, through the neglect of Amorbach and all succeeding editors. The latest text, that in Migne's *Patrology*, still depends on the ancient, mutilated, and frequently illegible MS., which was alone accessible to its first editor. In his and all succeeding editions many passages are left so corrupt as to be quite unintelligible. The notes on the ninth and tenth verses of the eleventh chapter of Second Corinthians are an excellent example. Amorbach frequently smoothed difficulties somewhat by writing something of his own. But the following can only be characterized as fraudulent interpolations: the insertion of the word *instrumento*, in the sense of 'testament,' due to Amorbach's own knowledge of Tertullian (703, 5), and the words *Callimachus scilicet* (941, 49). In three cases the editors have failed to print a clause of scripture, and have not noticed its absence: 1 Thess. iii. 5 (last clause); part of Titus i. 15; and Philemon 17. They have also left at least two hundred and twenty-nine quotations or reminiscences of scripture unidentified.

All these defects have made it extremely difficult to realize what the pseudo-Jerome commentary exactly is. There are at least eleven complete MSS. of it in existence.[2] Of these, three belong to

[1] e. g. Rom. xvi 21-3 *a*; 23 *c*, 1 Cor xvi. 3-4, 6 *b*-7; 11 (last two words), 12.

[2] See *Journ. Theol Stud.* (July, 1906), p 568 f., where strike out St. Gall 330, which is incorrectly described in the catalogue

the ninth century, Paris B. N. 1853, Epinal 6, and Munich 13038.[1] The first and second are both copies of the same lost MS, and their text is on the whole distinguished by omissions. These do not occur in the Munich MS., which must be regarded as the best of the three. It alone contains the supposititious letter to Heliodorus, and has it twice. They contain the usual Pelagian prologues *Primum intellegere nos oportet*, &c., and *Romani ex Iudaeis*, &c, which shows that these prologues are an integral part of the pseudo-Jerome commentary, though entirely wanting in the printed editions. It is possible now to say something as to the procedure of the author. Some time before the middle of the sixth century he took the Pelagian commentary, and, finding it too brief on the longer epistles, though apparently doctrinally unobjectionable, he added further notes on Romans, First and Second Corinthians, and Galatians, at frequent intervals, generally introducing them by *Item*. He took away very little: one example I have already mentioned. Further, whereas Pelagius's custom is to give a small clause, and then the comment on it, pseudo-Jerome appears to have preferred giving a bundle of clauses or sentences together, and to have allowed the comments to follow them. A certain amount of irregularity has thus crept in. It is possible that he arranged the text in a mass, and allowed the comments to follow one another between the lines or in the margins, or in both of these places, using signs to indicate the place to which each comment referred. If these signs were misunderstood, or omitted, this would account for the confused order which now presents itself in many cases in our MSS. He edited the Pelagian *argumenta*, generally curtailing them to that form which is frequent in Vulgate MSS These also are absent from the printed pseudo-Jerome. Possibly he added the particulars of stichometry which we find in some pseudo-Jerome MSS. as well as in the St. Gall MS. He divided the text up into the *capitula*, which Riggenbach has shown to be pre-Vulgate in origin,[2] and provided the work with lists of the titles of these *capitula*. He occasionally modified the citations of scripture in the commentary; occasionally also the language, if we can trust our MSS., and generally for the worse. He then composed a letter purporting to be from Jerome to one Heliodorus, and issued the whole under the name of Jerome. The pseudonymous authority attached to this form of the commentary accounts for the comparatively large number of MSS in which

[1] Perhaps it would be more correct to attribute this MS to the tenth century

[2] *Neue Jahrbücher fur Deutsche Theologie*, i. (1892) p. 529 ff., cf. also iii. (1894) p 350 ff. I owe my copies of these articles to the author's kindness

it is preserved. It should be added that while the Munich MS. contains no commentary on the Epistle to the Hebrews, the Paris and Épinal MSS. do.[1] The origin of this commentary does not fall within my province, but is to be discussed in a forthcoming work by Riggenbach.

The origin of the pseudo-Primasius commentary will henceforth cease to be a subject of debate. Turner, as we have seen, suggested that it was the revision of the Pelagian commentary made by Cassiodorus and his pupils. The words of Cassiodorus himself, when brought face to face with the internal evidence of the commentary itself, prove this to be the case. After he has enumerated complete commentaries on Paul's Epistles, he proceeds to mention commentaries on single epistles. In referring to commentaries on Romans, he mentions that Augustine's is well known to be incomplete, but that it can be supplemented by many valuable comments scattered up and down the works of that Father. He proceeds —[*Augustinus*] *Qui etiam scribens ad Simplicianum episcopum Mediolanensem sublimes et exquisitas de eadem epistula* (i.e. Romans) *tractauit aliquas quaestiones*, quas nos praedicto codici iudicauimus inserendas, *ne, dum expositio diuisa quaeritur, legentis intentio noxie differatur*. The 'praedictus codex' is the revised Pelagian commentary. Let us turn to the pseudo-Primasius. In the commentary on Romans, chap. x, we find two large extracts, one very large, from this very work of Augustine's to Simplician, headed 'Incipit expositio de libro sancti Augustini excerpta e loco ad sanctum Simplicianum, &c.'[2] They may be sought in vain in other commentaries. The pseudo-Primasius does not, then, belong to South Gaul, and is not a product of the fifth century, but belongs to South Italy and is a work of the sixth century, being in fact the revision by Cassiodorus.

The commentary is preserved in one MS. only,[3] No. 270 at Grenoble, of the twelfth century. This MS. I have not been able to see, but my fellow-traveller, Mr. E. J. Turner, formerly of Trinity College, Cambridge, and now of His Majesty's India Office, had the kindness to go to Grenoble and examine it on my behalf. He finds that a portion of the first leaf has been cut out, that the prefatory matter is absent, and that the commentary is anonymous, as a modern title containing the words *sine nomine auctoris* distinctly shows. The MS. contains all the long extracts from Augustine

[1] As do some later MSS., Riggenbach informs me (the Arras and Troyes MSS., for example).

[2] pp. 47^a to 54^a of the edition of Paris, 1543.

[3] Correct *Journ. Theol. Stud.* (July, 1906), p. 569.

exactly as the printed text does. It is likely that this is the very MS. from which the *editio princeps* of Gagney was printed in 1537. He tells us about his MS. '*in coenobio diui Theuderici, apud oppidum reperimus, quod vulgo Sanctum caput appellant Colonia est Viennensis archiepiscopi, non procul Lugduno in Delphinatu.*' This town is not far from Grenoble. Gagney has not been slavishly faithful to the MS., and, in at least one place collated for me by my friend, has deserted it wrongly: Gal. iv. 4, where *Nam aliter Iudaei* should be read with the MS, not *Nam si aliter*.

If this, then, be the MS from which Gagney printed the commentary, how came he to call it Primasius? I conjecture that it was due to the fact that he had been reading the first edition of Zmaragdus which appeared in the year before his own book, and had found there various extracts labelled Primasius which were obviously taken from the anonymous commentary he had in his hands. As we have seen, the repeated occurrence of the name Primasius in the editions of Zmaragdus is due to the wrong resolution of the symbol P̄, which means Pelagius. The accident that the name Primasius occurred in the list of authorities in Zmaragdus's preface caused his first editor to expand the symbol P̄ wrongly, and it was on this very shaky foundation that the commentary was attributed to Primasius. I believe that all copies were anonymous, as the original Pelagius itself was. No name was found attached to the commentary when it came into Cassiodorus's hands when it left his hands it remained without a name. Further, it is not impossible that Gagney used the printed Zmaragdus to improve the text of his pseudo-Primasius: this may on investigation be found to be the case.

There is a MS. of the Bibliothèque Nationale in Paris, No. 653, of the ninth century, which contains an anonymous commentary that is not a pure Pelagius, nor a pseudo-Jerome, nor a pseudo-Primasius. It is written in Caroline minuscules, but apparently by an insular scribe, and very likely from an insular original.[1] I conjecture it to be the Pelagius which was in the monastery of Corbie, near Amiens, and disappeared in the seventeenth century.[2] It begins with the *Primum quaeritur* prologue, followed by the *Romani ex Iudaeis*, and the small Pelagian argument on Romans, which actually appears twice. Then comes an extract on 'The Word was made Flesh': afterwards a long prologue to Romans, which is based on the *Romani ex Iudaeis* and is in fact an expanded edition of it. Then the commentary on Romans, and so on down to, and including, Hebrews, though

[1] There are Anglo-Hibernian initials on fols. 217, 218^{v}, 253^{v}, 265, 279, 287

[2] See Pitra in Migne, *P. L.* cii 1126 B

it is obvious, from the character of the commentary on Hebrews, that it has no connexion with the others.[1] The chief characteristic of the commentary, as compared with those we have been discussing, is its increased size. There are large blocks in it, especially in the Epistle to the Romans, that are not to be found in any of these. The compiler appears to have possessed both Pelagius and pseudo-Jerome, and to have combined them to make a larger commentary, selecting now from one, now from the other, and drawing at the same time from other sources, of which pseudo-Primasius does not appear to have been one. Where its text can be compared with the Karlsruhe MS. it appears to be very pure. It contains the Pelagian passage missing in pseudo-Jerome. The commentary is a really learned production. Though I have introduced it after the Pseudo-Primasius, I am not certain that it ought not to be put earlier. It appears to me that it is worth printing, and until it is printed it will be rather difficult to discuss. It has its defects, which seem to mark it out as not belonging to the early period. For instance, in the commentary on First Corinthians, chapter xiii, there are at least three cases where the same comment is given twice over in the same words. It appears as if the whole had been put together on a copy of the epistles. This would account both for the confusion in the order of the comments and for the duplication of certain of them. There are two interesting cases where the compiler appears to have had at his disposal passages from other works of Pelagius now lost. At least, he twice introduces Jerome and Pelagius as combatants. The passages are given in full in the Appendix.

There are two points about the Wurzburg and Vienna glosses which appear worthy of mention. The first is the close connexion between them and the citations in Sedulius Scottus.[2] It would appear as if Sedulius had used either the Wurzburg codex itself or its parent or some other allied MS. The probability of this is increased if we remember the Irish origin both of Sedulius and these MSS. The second point is that it might be worth while comparing the glosses in these MSS. that cannot otherwise be traced with the enlarged Pelagius in the Paris MS. I have just called attention to.

There is an anonymous Latin commentary on the Catholic Epistles in a Karlsruhe MS. (Aug. ccxxxiii, saec. ix), which has never been printed. Internal evidence proves it to be of Irish origin, and from

[1] Two folios are lost (at the beginning of a quaternion), containing *et ebrietate* (943, 26)—*gaudiumenim* (945, 28); most of the commentary on Hebrews is also lost (the text reaches to chap. iv. 3).

[2] See Hellmann's *Sedulius Scottus*, p. 165 f.

the fact that Bede's commentary on these epistles is nowhere quoted, I should conjecture it to be a compilation of the end of the seventh or the beginning of the eighth century. The compiler quotes Gregory (in the Irish form *grigorius*), Augustine, Jerome, Eucherius, and once Pelagius (in the Irish form *pilagius*). The quotation is from the note on Eph. vi. 14,[1] and this is a fresh Irish testimonium to the commentary to add to Zimmer's list. It is of interest to mention that he cites also three Irish teachers, *Brec(c)anus* (at least four times), *Bercanus* son of *Aido* (once), and *Manchianus* (once). Dr. Holder conjectures that the last is identical with St. Mochonna, who died March 8, 704. Dr. Quiggin suggests that Breccanus is perhaps the contemporary of St. Enda who lived in Aran at the end of the fifth century.

With regard to the St. Gall commentary I have not much more to say. Zimmer has sufficiently shown its composite character. It is apparently the work of some Irish mediaeval scholar. It is in the main pseudo-Jerome, but for First Corinthians the author appears to have used Pelagius only, as the second explanations in this letter are commonly absent. There is one remark I am compelled to make, and that is that the collation of Zimmer is less full and accurate than scientific purposes demand. Thus, on the last line of p. 295 of his book, *similitudinem* should be *similitudine*; on p. 296, l. 23 *baptizatis*, not *babtizatis*, is the reading of the MS. More serious are such errors as *peccatores* (p. 296, l. 5 from foot) for *peccantes*, and *confirmatur* (p. 298, l. 14) for *confirmetur*. As Zimmer's collation fills 140 pages, and these errors are contained within four pages, I may perhaps be excused from judging the St. Gall MS. at this stage.

A few words about Zmaragdus, to whose MSS. considerable attention has been devoted. Internal evidence seems to show that British Museum Additional MS. 21914 (saec. x), bought in Paris in 1857, was the imperfect MS. known to the first editor, and one of the only three known to him. Zmaragdus quotes both the original Pelagius and the anonymous pseudo-Primasius indiscriminately as P̄, i.e. Pelagius. Sometimes, but rarely, he quotes pseudo-Jerome, as H̄. Occasionally he uses the Pelagian commentary without any acknowledgement whatever. The list of quotations given by Riggenbach might be increased. Sometimes Zmaragdus adds clauses or sentences to his extracts, but as a whole his work is a catena from the writings of earlier authors. The editor did his work fairly well, but the text

[1] f. 13ᵛ *uirtutum quod pilagius loquitur de iustitia dicens sicut lurica multis armellis texitur ita iustitia multis uirtutibus ornatur*

can be considerably improved from MSS that were not accessible to him.

Riggenbach has recently noted, as Hellmann kindly informs me in a letter, that the commentary of (Atto or) Hatto, of Vercelli, who died in 960, quotes Pelagius on 1 Cor. xv. 31 with the words 'Pelagius dicit.'[1] I have compared the Karlsruhe MS[2] of this commentary, and find that at this point it exactly agrees with the published text, which was printed from the only other known MS, that at Verona.

At this point I must conclude. I am far from claiming to have solved everything connected with the history of this, the earliest, British book, but I trust that I have contributed something, and I hope to do more in the edition which has been undertaken for Cambridge *Texts and Studies.*

[1] Migne, *P. L.* cxxxiv 402 C

[2] Aug cl (saec. x–xi).

APPENDIX

A

PROLOGUES IN COD AUG. CXIX (SAEC IX)

AD CORINTHEOS SECUNDA EXPLICIT INCIPIT AD GALATAS ARGUMENTUM

Quos pseudo apostoli hac substantia[1] subuertebant, quo[2] dicerent omnes Christi apostolos aliter praedicare, Paulum quoque ipsum alibi docere homines circumcidi,—'denique discipulos suos,' dicebant, 'quos bene diligit, circumcidit,'—sed nec apostulum illum esse dicentes, uidelicet quia neque ex XII electis esset, neque Christum cum Petro et ceteris fuisset aliquando secutus. quia[3] ueri similibus argumentis et callidae derogationi, quibus paruuli decipiebantur, necesse habet ex auctoritate spiritus sancti ad singula per ordinem respondere, ne despectu eius et odio capti Galatae penitus interirent

The pseudo-Primasius argument consists of the 'Pelagian' argument in the *Book of Armagh*, followed by the present argument without interval to form one argument, though the language of the present argument is considerably modified Wanting in ps -Hier. (Clm 13038 [saec x])

EXPLICIT AD GALATAS · INCIP AD EPHESIOS, ARGUMENTUM.

Ephesii ex Iudaeis et gentilibus Paulo apostolo praedicante crediderunt, quibus firmiter stantibus scribit et in principio quidem epistulae Iudaeos appellans incarnationis Christi sacramenta exponit, post ad gentes conuersus hortatur ut tantis beneficiis non sit[4] ingrati; deinde communiter usque ad finem moralia praecepit instituta.

Agrees with 'Pelagian' argument in the *Book of Armagh*, and the argument in ps -Hier. Clm. 13038 (saec x), with some slight differences. It forms also the latter part of the St. Gall argument and of the pseudo-Primasius argument, the former part of which is in the Wurzburg codex

AD EPHESIOS EXPLICIT INCIPIT AD PHILIPPENSES ARGUMENTUM.

In Actibus Apostulorum legimus quod ipso praedicante crediderint Philippesses in Christo. hii ergo tantum in fide ac scientia profecerunt ut euangelium praedicarent et defenderent a pseudo apostolis impugnatum. quapropter ab his tantum sumptus se memorat accepisse, etiam cum alibi praedicaret hos ergo conlaudans monet ne eius passionibus terreantur, quibus non destruitur Christi euangelium sed firmatur, dum intellegi datur eum tanta pata (*corr.* pati) pro re falsa uel dubia omnino non posse. ideoque hortatur exemplo suo eos libenter usque ad mortem certare pro Christo.

With some slight differences, this constitutes the last portion of the pseudo-Primasius and St. Gall arguments. The *Book of Armagh* argument corresponds to the middle portion, and the first portion is borrowed from genuine Jerome. Ps.-Hier in Clm 13038 (saec. x) consists of the above down to *euangelium Christi*.

[1] Read *sententia*. [2] Read *qua* [3] Read *qui*. [4] Read *sint*.

EXPL AD PHILIPPENSES · INCP AD THESSALONICENSES PRIMA.

Thessalonicenses non solum ipsi in omnibus perfecti erant, sed etiam alii eorum uerbo profecerant et exemplo. laudando ergo illos apostolus ad maiora prouocat et mutat.

There is nothing corresponding to this in ps.-Pr., but it is closely related to the second half of the *Book of Armagh* argument, and is added by another hand in the Wurzburg MS.

EXPL AD THESSALONICENSES PRIMA INCIPIT AD EOSDEM SECUNDA ARGUMENTUM.

Iustum erat ut superius crescente eorum fide et caritate et illorum quoque laudatio augeretur. simul et illut eis praenuntiat, quod nouo argumento eos quidam a fide depellere temptaturi essent, quo dicerent Christum uelociter adfuturum, et quem uellent pro Christo facile inducerent ad suadendum.

Ps.-Pr. contains no argument. The above corresponds to the second half of the *Book of Armagh* argument

EXPL AD THESSALONICENSES SECUNDA INCP AD COLOSSENSES

Quorum auditam fidem in principiis laudat, deinde monet ne per philosophiam uel legis caerimonias seducantur.

The above is in ps.-Hier. (Clm 13038 [saec x]), and corresponds to last part in ps.-Pr., and more closely to the middle part in the *Book of Armagh*. It is omitted by the Wurzburg and Vienna MSS.

EXPLI AD COLOSSENSES—INCIP AD TIMOTHEUM PRIMA ARGUMENTUM.

Hic episcopus fuit discipulus apostoli Pauli. huic per litteras dat auctoritatem corrigendi omnem ecclesiasticam disciplinam et episcopos ac diaconos ordinandi. praeterea instruit eum quo modo pseudo apostolis sibi detrahentibus res^nde^poret, rationem reddens quod non sit mirum si ipse ex persecutore saluatus sit, cum Christus peccatores uenerit liberare. ad extremum aliter docentes monet esse uitandos.

Above is in ps.-Hier. (Clm 13038 [saec x]) and is nearly the whole of St Gall argument. Ps.-Pr. consists of the *Book of Armagh* argument immediately followed by the above.

AD TIMOTHEUM PRIMA EXPL INCP SECUNDA.

Cum esset Romae in uinculis constitutus, scribit Timotheo commonens eum ne per eius absentiam uel propriis uel magistri tribulationibus terreatur aut testimonium domini erubescat, pro quo ipse usque ad mortem certauit, simul et de haereticis uitandis atque his qui su^a^is magis fabulas quam dei praedicant ueritatem.

Ps.-Pr. consists of the *Book of Armagh* argument immediately followed by the above. Ps-Hier. (Clm. 13038 [saec. x]) consists of the above down to *certauit*.

AD TIMOTHEUM SECUNDA EXPL INCP AD TITUM ARGUMENTUM.

Discipulum suum episcopum, quem conmonet et instruit de constitutione praesbiterii et de spiritali conuersatione et haereticis uitandis, qui in scripturis Iudaicis alios seducebant.

Book of Armagh and ps.-Pr. and St. Gall have practically the same

EXPLICIT AD TITUM INCIPIT AD PHILEMONEM.

Cui apostolus a Roma scribit de carcere pro Honesimo seruo eius, quem apostolus erudiens baptizauit sciens eum facilius a domino suo ueniam promereri quam iam a deo fuerat consecutus promittens illum de cetero correcturum. nihil magis est in hac epistula attendendum nisi quanta humilitate discipulum depraecetur dans nobis exemplum quid aput aequales facere debeamus.

[at end of commentary, EXPL AD PHILIMONEM].

Ps.-Pr., St. Gall MS. and *Book of Armagh* have only the first clause, slightly altered Clm. 13038 of ps.-Hier (saec. x) gives the above with slight differences, the omission of *cui, a, suo, iam, dans nobis exemplum quid aput aequales facere debeamus,* and *eum* for *illum.*

B

Documents in Cod. Paris. B. N. 653 (saec. ix).

(f. 5) UERBUM CARO FACTUM EST. Sic accipimus quod hominem sibi adsumpserit deus, quo se ut ita dicam pro quodam habitu induerit propriaque semper manente substantia ita habitaret in interiore[1] natura, ut nihil de sua amitteret summitate. uelut si quis imperator regalis[2] potestate sublimis belli tempore occultatae[3] purpurae nobilitate sumat militis habitum et cum neque potestatis suae dignitate priuetur et nihilo minus tamen militis fungatur officio, facile et recte dici potest: 'imperator miles factus est' non enim ille per hunc habitum priuilegia sui honoris amisit nec omnino transiuit in militis uilitatem et cessaret esse quod fuerat · quin immo hinc multo etiam excellentior habetur atque sublimior, quia contra suam quodam modo dignitatem pro[4] humile aliquid pro populi sui salute suscepit.

Ita ergo et dei filius dum pro remedio generis humani carne hominis induitur caro factus asseritur et, quamuis ad deitatem uerbi perfecta substantia humanitatis accesserit, non tamen filii persona geminata est, sed hoc a filio susceptum quod ante non habuit. ne cui autem uideatur obscurum, quod homo deitati iunctus est, et per hoc duos uelit filios estimare, intellectum sibi de comparatione suscipiat.

Arte animae[5] et corpus duae sunt diuersaeque substantiae et unum tamen ex utroque hominem faciunt adque interdum solius animae interdum tantum corporis appellatione integer nominatur. quamuis enim gemina substantia sit, tamen una persona est. ita et dei

[1] Read *inferiore.* [2] Read *regali* [3] Read *occultata*
[4] Omit *pro* [5] Read *anima.*

uerbum, licet se integro homine uestierit aliamque probetur suscepisse substantiam, unus tamen filius esse non desinit.

(f 6) De numero apostolorum quaeritur, quos inuenimus XIIII—nam in locum Iudae Mathias ordinatus est, deinde Barnabas et Paulus ad gentes mittuntur non sine domini uoluntate,—nam ipse dicit *segregate mihi Barnaban et Paulum in opus quod elegi eos* [1]— deinde quare uoluerit apostolus Paulus scribere post euangelia, cum noui testamenti doctrina per euangelia sufficeret. sed non sine exemplo hoc fecit—nam et cum lex Mosi esset, prophetae nihilo minus populum docuerunt, uel propter existentes nouas causas in quibus populum corrigi necesse erat uel [2] recentioribus semper praedicationibus adsint [3] †quemammodum et positae quod ratio excludit nam cum multo ante alii crediderint ut Corinthii et qui in illis partibus, hoc est orientis, morantur, quo modo Romanis prioribus ** scribitur ? non ordine sed merito digeruntur, ut quidam gradus uel doctrinae uel profectum [4] inueniatur nam a leuioribus inchoans ad perfectiora progreditur, ut in singulis epistulis si perpexeris [5] recognosces.

Causa epistulae haec est cum ex duobis populis credidissent, hoc est ex Iudaeis et gentibus, uenientes in unam fidem praeponi se sibi alterutrum cupiebant, dicentibus Iudaeis · 'nos semper "populus dei" uocati sumus · nobis prophetae Christum annuntiauerunt ex nostro certe genere natus est. uos autem idolorum cultores fuistis' respondebant hi, qui ex gentibus uenerant · 'eo magis indigni estis, qui, cum fuissetis populus dei, totiens ab illo per praeuaricationem recessistes, eligentes idola quibus seruistis obliti beneficiorum dei nam et prophetas qui uobis filium dei annuntiabant, alios lapidastes alios occidistis, ipsum etiam Iesum Christum, qui ex uestro genere natus est, non agnoscentes esse filium dei, cruci fixistis nos autem, quam uis per ignorantiam idola coluerimus et per errorem nescierimus uerum deum, tamen ubi nobis annutiatus est, statim credidimus.' his inter se contentionibus dissentiebant.

Apostolus utriusque partis causam similem ostendens admit simultatem dicendo de gentibus quod, quam uis legem non habuerint, naturaliter potuerint deum intellegere, dicendo · *inuisibilia enim ipsius a creatura mundi per ea quae facta sunt intellecta conspiciuntur* [6]; Iudaeis autem non profuisse legis obseruationem, cum Christo non crediderint, ait · *finis enim legis Christus ad iustitiam omni credenti*,[7] et ita utrumque populum sub peccato positum dei gratiam consecutum, ut ipse dicit: *omnes enim peccauerunt et egent gloria dei*,[8] et iterum · *conclusit omnia sub peccato, ut omnibus misereatur*.[9] ergo reuocantur in gratiam, cum par utriusque partis meritum repperitur.

[1] Act xiii. 2 (Vigilius (?) *contra Varimadum* is the only authority for *elegi* in Wordsworth and White).

[2] *Add* ut *here*

[3] After this word there is evidently a passage lost about the relative position of the letters of St. Paul.

[4] Read *profectus*.

[5] Read *perspexeris*.

[6] Rom. i. 20.

[7] Rom. x. 4

[8] Rom iii 23.

[9] Rom. xi 32.

[Between this prologue and the beginning of the commentary proper a fourteenth-century hand has written 'Incipit expositio in epistola ad romanos']

It is obvious that this prologue is a later production, manufactured out of the *Primum quaeritur* and the *Romani ex Iudaeis* combined. the borrowing is somewhat disguised by a recasting of the expression

f. 191. [For 'spirituale desiderium' (857, 22 = 820, 44 = in Gal. v 17) it reads 'spiritalem,' which is followed by —

ALITER Hieronymus, 'qui nouit,' inquid, 'aliam esse carnis fragilitatem, aliam spiritus fortitudinem' *caro enim concupiscit aduersus spiritum, spiritus autem autem*[1] *aduersus carnem haec enim inuicem aduersantur, ut non, quaecumque uultis, illa faciatis*[2]

Pelagius ut autem ex hoc quoque agnoscas loco apostolum hoc non in sua[3] sed in carnalium hominum dixisse personam, non dixit 'ut non, quae uolumus, illa faciamus' sed ait '*ut non, quaecumque uultis, illa faciatis.*'[2] si autem generaliter omnes homines a bono opere carnis necessitate retrauntur, quur non etiam suam personam simul miscuit, quam eiusdem naturae carnem gerens no quae uellet, ut dicis, sed quae nolet cogeretur efficere? *caro enim concupiscit aduersus spiritum et*[4] *spiritus autem aduersus carnem*[2] nullus peritorum dubitat apostoli esse consuetudinem 'carnem' pro carnalibus operibus nuncupare et substantiae nomine rem conuersationis exprimere idque auctoritatem ueterem scripturarum. legimus enim in Genesi dicentem deum. *et non permanebit spiritus meus in hominibus istis, propter quod caro sunt* non despicit creaturam quam fecit, sed praua opera creaturae, et tamen ita loquitur ut si non rectae intellecta si[5] uideatur damnare naturam hominis ipse qui condidit. unde et apostolus,—ut multi prudentium intellegunt, 'etsi in alterius persona' dicat, *non habitat in carne mea bonum*[6]—, non indagit[7] ut naturam carnis malam esse demonstret, ne, ut tu putas, Manicheorum aplaudat errori, sed in consuetudine atque opere carnali habitare bonum negat, cumque ait *caro concupiscit aduersus spiritum, spiritus autem aduersus carnem haec enim inuicem aduersantur, ut non quaecumque uultis illa faciatis,*[2] non contrarias inter se compugnantesque substantias a deo credit esse coniunctas, sed spiritalem uoluntatem a carnali consuetudine impugnari docet, quae, quam diu per spiritus fortitudinem et assidue sanctitatis usum uicta non fuerit, rediuiua proelia semper instaurat.

Alioquin, si hoc de carne—id est, de substantia carnis—intellegendum est, quod spiritui semper aduersa sit, *ut non quae uolumus illa faciamus,*[2] uidetur deus non ad ministerium boni operis carnem spiritui copulasse, sed ad peccandi necessitatem. etiam non nostro uitio bonam non efficimus uoluntatem, si in malum opus necessitate compellimur. sed ut ostendat peccati necessitatem non esse, subiungit

[1] Omit the second *autem*. [2] Gal. v. 17. [3] Read *suam*
[4] Omit *et*. [5] Read *recte intellectus*
[6] Rom. vii 18 [7] Read *inde agit*

quod si spiritus[1] *ducimini, non estis sub lege*,[2] et superius ait *spiritu ambulate et desideria carnis non perficietis.*[3] ergo poterant hanc inpugnationem carnis uincere, si ad implendam domini uoluntatem solo spiritu—id est, spiritali consuetudine—ducerentur. *manifesta*, inquit, *sunt opera carnis, quae sunt fornicatio immunditia luxoria idolorum seruitus ueneficia inimicitiae contentiones aemulationes irae rixae dissensiones sectae inuidiae homicidia ebrietates et his similia, quae praedico uobis, sicut et praedixi, quoniam qui talia agunt regnum dei non consequentur.*[4] si ita omnia per necessitatem et inpugnatione[5] carnis uitare non possumus, quo modo nobis, si haec agamus, caelorum regnum negabitur? quur etiam e diuerso ad uirtutem praemiorum desiderio prouocamur, si necessitate uitiis seruiendum est? sed aperte apostolicus sermo demonstrat non omnes carnali consuetudine esse deuinctos, ut propriae neglegentiae deputemus, qui spiritus fortitudinem carnis desideriis subiugamus. cum enim dicit. *qui talia agunt, regnum dei non consequentur*,[6] ostendit esse alios, qui talia non agentes consecuturi sint regna caelorum. et si sunt aliqui, qui non carnaliter sed spiritaliter conuersando digni efficiantur proemio[7] futurorum, quo modo, quod alii sunt, non omnes posse credamus?

Et ut euidentius apostoli consuetudinem esse doceamus 'carnem' opera uelit[8] carnis intellegi, legamus ad Colosenses epistulam, in qua euidentius atque signatius[9] singula carnis opera 'membra'[10] nominat: *mortificate autem membra uestra, quae sunt super terram*, non utique oculos manos aures et cetera, sed. *fornicationem*, inquid, *libidinem concupiscentiam malam et auaritiam, quae est simulacrorum seruitus.*[10] quo modo ista possunt mortificare membra uitiorum, sic etiam omnia illa quae carnis esse opera nominauit, ut, quemammodum ipse dixit· *destruatur corpus peccati, ut ultra non seruiamus peccato.*[11] [After this l. 23 (= l. 55) *Haec . . . aducisantur* is omitted.]

f. 228 [After 're' (888, 41 = 849, 24 = in Phil. iii 12)].

AL(ITER) Hieronymus 'unde et apostolus,' ait, 'ex parte accepisse et ex parte conprachindisse se dicit, et needum esse perfectum, praeteritorum quoque obliuiscit[12] et in futurum se extendere. qui semper praeteritorum obliuiscitur et futura desiderat, ostendit se praesentibus non esse contentum.'

Pelagius. si tuam hoc quoque loco uelimus considerare sententiam [*margin has* hoc loco Pelagii sensum non ad probandum sed ad detegendos callidos eius errores legendum], etiam ex hoc ipso probabimus apostolum fuisse perfectum, quo se imperfectum fatetur. ais enim hanc esse in hominibus summam perfectionem siue perfecto[13] esse se nouerint. sed, cum idem apostolus statim subiungat et dicat:

[1] Read *spiritu* [2] Gal. v. 18. [3] Gal v 16.
[4] Gal. v. 19–21. [5] Read *inpugnationem.*
[6] Gal v. 21. [7] Read *praemiorum.* [8] Read *uelut.*
[9] Perhaps read *signantius* [10] Col. iii. 5. [11] Rom vi 6.
[12] Read *obliuisci*, cf. Phil. iii. 12, 13. [13] Read *si imperfectos.*

quicumque ergo perfecti sumus, hoc sentiamus,[1] non cum confessione inperfectionis perfectum fuisse credimus, sed possessione uirtutum, et quo modo inquies ipse · 'nondum se dicit esse perfectum,' et e contrario. 'quo modo ipse non solum se sed etiam alios dicit esse perfectos'? qui utrumque legimus, utrumque intellegere debemus, non ex unius obscuritate alteri praeiudicare duas enim, quantum ex hoc ipso loco intellegi datur, species perfectionis ostendit; una[2], quam[3] aliquis omnia dei mandata seruando perfectus est et tamen, quia longum adhuc uiuendi spatium superest, necdum perfectionis possidet securitatem, alteram uero, qua consummato iam curso uitae finis in proximo est, nec tam de periculo perfectionis timetur quam de solo iam praemio cogitatur, ad quam consummationem tunc beatum apostolum credimus peruenisse, cum dixit. *certamen bonum certaui, cursum consummaui, fidem seruaui, de cetero reposita est mihi corona iustitiae.*[4]

The above two passages have never been printed before, as far as I know I have no reason to regard them as anything but genuine pieces of Pelagius. The orthography of the MS. is intentionally retained.

[1] Phil iii. 15.
[2] Read *unam*
[3] Read *qua.*
[4] 2 Tim iv 7–8.

OBITUARY NOTICES

BY THE PRESIDENT,

AT GENERAL MEETING,

December 20, 1905

LORD REAY, the president, in rising to move that the Academy should offer the expression of their deep sympathy to Lady Jebb, said:—'At our first re-assembling we paid a tribute to David Binning Monro, and now again a grievous blow has befallen us. Those who are even but slightly acquainted with the first beginnings of the movement which culminated in the foundation of the Academy must know how great a part the late Sir Richard Jebb took in the work at that critical period. He was devoted to the Academy, and he appreciated our friendly feelings towards him. He was firmly convinced that a great future was in store for this Academy. He took a leading part in overcoming the difficulties which beset an institution at the outset of its career. He was never discouraged, and was always ready to grapple with the problems which confronted us. The loss we have sustained cannot be exaggerated. His memory will remain with us as a living force, and stimulate us to strenuous exertions in order to realize the ideal which Jebb had in view. In the Academy he saw the means of concentrating all efforts to maintain a high standard of scholarship, to direct in various channels research, to establish co-operation where, as in the case of the Greek Thesaurus due to his initiative, scholars of all nations had to be enrolled. Foreign academies readily accepted his guidance, and I am sure that they are with us deploring his loss. Jebb was more than a scholar. He was a literary artist. He had the rare gift of giving a clear and simple expression to the beauty of any language in which he conveyed his brilliant ideas. He had a genius for language. With scientific precision he coupled the imaginative gifts which gave a peculiar charm to his speeches and his writings. Literary power was wielded by Jebb as a real

SIR RICHARD CLAVERHOUSE JEBB,

1841-1905.

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pointed Regius Professor of Greek as successor to Benjamin Hall Kennedy in 1889. His chief works since his appointment in Glasgow have been *Attic Orators* (1876), a *Book of Translations* (1878) in collaboration with Prof. Jackson (now Jebb's successor in the Cambridge Chair of Greek) and Mr. Curry, a Fellow of Trinity, Cambridge, *Modern Greece* (1880), *Bentley* in the Series of English Men of Letters (1882), *Introduction to Homer* (1886), *Lectures on classical Greek poetry* delivered in Baltimore, U.S.A. (1892), the monumental edition of *Sophocles* (1883-96), and *Bacchylides* (1905).

Jebb was known as a master of the art of composing in Greek and Latin before he won his way to the first rank among sound and brilliant editors. His whole career has done much to vindicate a highly artistic and scholarly accomplishment as an invaluable adjunct to the equipment of an editor of classical texts. The same exquisite taste and sense of beauty which gave him his primacy among composers made him also the sanest of emendators. In emending he was, perhaps, too cautious. Some of his conjectures, which in his modesty he relegated to the notes, were worthy of a position in the text in the opinion of many learned and wary critics. All his conjectures show a keen sense of style. His powers in this direction won for him a signal distinction—the dedication to him by Lord Tennyson of his poem, 'Demeter and Persephone,' with a curiously exquisite allusion to Jebb's Pindaric Ode in honour of Bologna and her University —

> Fair things are slow to fade away,
> Bear witness you, that yesterday
> From out the ghost of Pindar in you
> Roll'd an Olympian; and they say
> That here the torpid mummy wheat
> Of Egypt bore a grain as sweet
> As that which gilds the glebe of England,
> Sunn'd with a summer of milder heat.
> So may this legend for awhile,
> If greeted by your classic smile,
> Tho' dead in its Trinacrian Enna,
> Blossom again on a colder isle.

An equally great feat is his rendering in the measures of Pindar's fourth Pythian ode of Browning's *Abt Vogler*, which, at least to the present writer, is certainly far clearer and more intelligible in the Greek than in the English.

It will be interesting to quote Jebb's own views on the use of conjecture from the Introduction to the *Oedipus Rex*, p. lvii.—

The use of conjecture is a question on which an editor must be prepared to meet with large differences of opinion, and must be content if the credit is conceded to him of having steadily acted to the best of his judgement. All

students of Sophocles would probably agree at least in this, that his text is one in which conjectural emendation should be admitted only with the utmost caution His style is not seldom analogous to Virgil in this respect, that when his instinct felt a phrase to be truly and finely expressive he left the logical analysis of it to the discretion of grammarians then unborn. Such a style may easily provoke the heavy hand of prosaic correction ; and, if it requires sympathy to interpret and defend it, it also requires, when it has once been marred, a very tender and very temperate touch in any attempt to restore it Then in the lyric parts of his plays Sophocles is characterized by tones of feeling and passion which change with the most rapid sensibility—by boldness and sometimes confusion of metaphor—and by occasional indistinctness of imagery, as if the figurative notion was suddenly crossed in his mind by the literal.

Another highly important duty of an editor lies in dealing with questions of interpolation. Jebb set his face against the hacking and slashing of the Greek masterpieces which is now so prevalent in Germany. On this subject he wrote judiciously and with a characteristic touch of gentle humour in his Preface to the *Oedipus Coloneus*.

It is allowed on all hands that our traditional texts of the Attic dramatists have been interpolated here and there with some alien verses or parts of verses But there has been a tendency in much of recent criticism to suspect, to bracket, or to expel verses as spurious, on grounds which are often wholly inadequate, and are sometimes even absurd In this play upwards of ninety verses have been thus suspected or condemned by different critics, without counting that part of the last kommos (1689–1747) in which it is certain that the text has been disturbed [Jebb here gives a list of the supposed interpolations in the *Oed. Col.*, and adds] : I know not whether it is too much to hope that some reader of these pages will take the trouble to go through the above list of rejections or suspicions, and to consider them in the light of such aid as this edition seeks to offer towards the interpretation of the play. If any one will do that, he will form a fair idea of the manner in which a certain school of criticism (chiefly German, but not without imitators elsewhere) is disposed to deal with the texts of the Greek dramatists. When an interpolation is surmised or assumed, it is usually for one (or more) of the following reasons.—(1) because something in the language appears strange , (2) because the verse seems inconsistent with the immediate context, or with the character of the speaker ; (3) because the verse seems inconsistent with something in another part of the play , (4) because it seems weak or superfluous In dealing with the first class of objections—those from language—the grammarian is on his own ground. But the second, third, and fourth classes of objections demand the exercise of other faculties—literary taste, poetic feeling, accurate perception of the author's meaning, insight into his style, sympathy with his spirit. Consider, for instance, why Nauck suspects two of the finest verses in a beautiful passage of this play (610 f) :—

Earth's strength decays, the body's strength decays,
Faith dies, distrust is born.

He ascribes them to an interpolator because only the second is pertinent ; the decay of faith is in point , but what have we to do with the decay of earth or of the body? This is not a whit worse than very many of the examples in the above list Could Sophocles come back and see his text after all these expurgators had wreaked their will, he might echo the phrase of the worthy Acharnian, as he held up his ragged garment to the light—ὦ Ζεῦ διόπτα.

This happy allusion to a scene in Aristophanes is an example of that gentle and refined view of humour which in his conversation often charmed his intimate friends, but which he was chary of bringing into the light of public life He did not call on this faculty in his fine and beautifully polished speeches in the House of Commons, which he entered as member for his University in 1901, the year after he received the honour of Knighthood. But it sometimes appears in his writings Here is a characteristic passage from *Bentley*, a model biography —

The bull may be seen, portrayed by the fancy of a modern artist, in the frontispiece of Charles Boyle's edition of the Letters. The head of the brazen animal is uplifted, as if it was bellowing, one of the tyrant's apparitors is holding up the lid of a large oblong aperture in the bull's left flank, two others are hustling in a wretched man, who has already disappeared all but his legs. The two servants wear the peculiar expression of countenance which may be seen on the faces of persons engaged in packing. Phalaris is seated on his throne just behind the bull, in a sort of undress uniform, with a long round ruler for sceptre in his right hand, firmness and mildness are so blended in his aspect that it is impossible not to feel in the presence of a great and good man On the left side of the throne a Polonius is standing a little in the background with a look of lively edification subdued by deference; and in the distance there is a view of hills and snug farmhouses suggesting fair rents and fixity of tenure.

The works of Jebb are very widely known and highly appreciated on the continent. His introduction to Homer has been translated into German. His last work, *Bacchylides*, is by some regarded as his masterpiece. It was happily completed before his death, due to an ailment contracted in South Africa when he visited that country in company with the British Association in the autumn of 1905. It is indeed a worthy coping-stone to the stately edifice of his life-work, and shows that combination of sanity of judgment and brilliancy of execution which characterizes all his writings

Jebb was an honorary graduate of Oxford, Dublin, and the Scottish Universities, and enjoyed similar honours conferred by foreign institutes. He was one of the original fifty members of the British Academy, and sat on its Council. He was honorary Professor of Ancient History in the Royal Academy, and held the recently instituted Order of Merit. He became a Fellow of London in 1897, and in the same year President of the London Hellenic Society; and Trustee to the British Museum in 1903. He contributed to various classical and literary magazines, and wrote several articles on classical subjects for the *Encyclopaedia Britannica* (1875–88). He was married in 1874 to the widow of General Slemmer of the United States Army. It is understood that Lady Jebb is engaged on a Memoir of her late husband.

R. Y. TYRRELL.

DAVID BINNING MONRO, 1836–1905

IN the late Provost of Oriel College, his country has lost its most eminent Homeric critic and his University one of its wisest counsellors and most gifted scholars.

David Binning Monro, born in Edinburgh, November 16, 1836, came of a Scotch family of position. As eldest son, he inherited the two properties of Auchinbowie in Stirlingshire and Softlaw in Roxburghshire. He had ancestors of high rank in the scientific world, his grandfather, great-grandfather, and great-great-grandfather were all of them Professors of Anatomy in the famous medical faculty of Edinburgh.

As a young student at Glasgow he showed the many-sided talent which distinguished him in later life. He excelled not only in Classical Philology, but also in Mathematics and Logic, and when he left Glasgow for Oxford it is said that he was at first uncertain whether he should devote himself chiefly to Mathematics or to Philology.

At Oxford he won a scholarship at Balliol College, and besides this, he obtained from Glasgow the Snell Exhibition. His career as a student was remarkable. In the Degree Examinations he distinguished himself again in both Classics and Mathematics. In 1858 he won the 'Ireland Scholarship.' In 1859 he obtained the University Prize for a Latin Essay on the Argonaut Myth (an augury of what was to be the work of his life), and after a brilliant examination was elected Fellow of Oriel College.

He at first studied for the Bar, but on the special invitation of his college he came back to Oxford, where for fourteen years, that is, till he became Vice-Provost and, in effect, head of the college, he devoted himself to the work of a tutor and lecturer.

Here his many-sidedness came again to light for in the list of his lectures are found, besides Homer and Comparative Philology, subjects of Greek Philosophy, Early Greek History, Thucydides, Herodotus, Early Roman History, Roman Constitutional History, and

Roman Public Law. In Logic he was always interested, and it was a kind of hobby of his to give 'Pass-men' instruction in the elements of it. He printed also a short outline of the Rules of Syllogistic Logic for the use of his hearers.

But all his life long Homer and the study of Comparative Philology remained his chief interests. With regard to the latter he was held by far the greatest authority in Oxford after Max Muller For him, indeed, these two branches were intimately connected, and he expressly advocated the necessity of a thorough knowledge of the results of linguistic research for the criticism of Homer. An interesting example of this view is a paper of his (*Transactions of the Oxford Philological Society*, 1888-9, p. 6), where it is shown how a number of erroneous emendations had arisen in some cases from imperfect acquaintance with Comparative Philology, and in others from imperfect acquaintance with Homeric idiom.

The first publication which made Monro known outside his own University was apparently his article in the *Quarterly Review* for October, 1868, entitled 'The Homeric Question.' In later years he recast and developed his views in an article published in the *Encyclopaedia Britannica* (1880, art. 'Homer')—an essay which remains to-day unsurpassed in English scholarship in this field, or only surpassed by his own last utterance in the edition of the *Odyssey*. A copy of this was found among his papers with manuscript changes and additions intended for a new edition in the *Encyclopaedia Britannica*. This has been prepared for publication by his faithful fellow-worker, T. W. Allen.

After this he wrote regularly year by year essays, reviews, and articles on a variety of subjects—Homer and the Epic Cycle, Comparative Philology, Roman Antiquities, Plato, Aristotle, Greek Grammar, Greek Mathematics, and Greek Music, in the *Quarterly*, the *Academy*, the *Journal of Philology*, the *Transactions of the Oxford Philological Society*, the *Journal of Hellenic Studies*, the *Classical Review*, and the *Historical Review*, about ninety articles in all [1]; for the most part short but to the point, and generally decisive; for Monro was wont only to write when long and scientific testing of evidence had made him fairly sure of his ground.

He collated the Venetian MSS. of the scholia to the *Iliad* for Dindorf's edition (Clarendon Press, 1875 and 1878).

His first book appeared in the year 1878. Monro exercised so strict a self-criticism that it was sometimes doubted whether he would

[1] For an enumeration of these see a short memoir published by the Clarendon Press.

ever come to a book at all, and it so happened that his first was a school edition of *Iliad I*, apparently a small matter for a man of his reputation. But the modest little volume, which contained an excellent short Homeric Grammar, betrayed the hand of a master, and the competent judge could observe how often in it traditional and unquestioned explanations of the text were disposed of in an unassuming manner. Six years later appeared his school edition of the first half of the *Iliad*, and in 1889 that of the second half. The short introduction on the main points of the Homeric question and the short summaries of the argument of the books are excellent of their kind. The latter taken together give a clear view of what is most essential in the way of evidence for the unity and consistency of the whole poem

In 1882 appeared at last his principal work, the *Grammar of the Homeric Language*, so long in the conception, and so eagerly awaited by his fellow-workers. This book put him in the first rank among grammarians and Homeric scholars, and confirmed in the world at large the reputation which he had long enjoyed at home.

The second edition of the *Homeric Grammar* appeared in 1891, in 1894 *Modes of Greek Music*. The latter constitutes an important contribution to the history of this celebrated problem; and even if perhaps the solution offered should not win approval, the union of clear exposition and logical arrangement of the materials with accurate knowledge of the ancient sources and mastery of the principles of music must command admiration. In 1896 he published an edition of the Homeric text, *Homeri opera et reliquiae* (the readings for the *Hymns* by T. W. Allen), and in 1902, in collaboration with T. W. Allen, a text of the *Iliad* provided with an apparatus criticus

But the chief work of his later years was an edition of the last twelve books of the *Odyssey*, with a Commentary and comprehensive appendices on the chief problems of Homeric research, published by the Clarendon Press in 1901. Here are put together the results of years of careful study of the Homeric question. With unwearying industry he had made himself master of all the necessary material, and had submitted everything to a slow, thorough, and searching scrutiny. The remarkable patience with which he reserved his judgement was a proverb among his acquaintance, who, indeed, often felt that his decision might be too long deferred. But Monro had a horror of all that was unripe and premature, and his long deliberation is fully justified by its results, which, as time goes on, will be recognized more and more as a pattern of sound and sober judgement. It must be expressly noticed that Monro possessed just the faculty which,

though necessary before all else to the handling of the Homeric question, is only too often lacking in criticism of the analysing and dissecting type—a fine sense of literary form

Monro's style is scientific in the best sense of the word, compact and curt, but not sacrificing lucidity to brevity, good pure English 'simplex munditiis.' The mode of statement is singularly clear, and the course of the argument shows an analytical transparency for which perhaps he had to thank his training in Logic and Mathematics.

In the various movements of his time for the reform and advance of the higher education Monro bore an important part.

In all probability he was the chief and perhaps the sole founder of the Oxford Philological Society. He was the first president of it · the first meeting (1870) was held in his rooms in Oriel College, and, with a few exceptions, for thirty years all the meetings were at Oriel. During the whole of this time he was president; the first nine years he was also secretary, and managed all the affairs of the Society. It should not be forgotten that it was Monro who organized a union of certain Oxford colleges to form collections of special subjects in their libraries.

He belonged to the group of scholars who founded the *Academy*, and was for many years a contributor. He had a share in the institution of the Hellenic Society. From the beginning he was a member of the Council, and often attended its sittings. From 1886 onwards he was Vice-President of the Society itself. He was also a member of the Standing Committee which founded and controlled the *Journal of Hellenic Studies*.

In the establishment of the Classical Association of England and Wales Monro played a considerable part, as is apparent from the account of its first meeting (see *Classical Review*, February, 1904). From the beginning he was Vice-President, attended the public meetings, and he was often at the sittings of the Council, and took a lively interest in the work of the Society.

He was always a generous supporter of the British School at Rome, and for the last fifteen years of his life was on the Council of the British School at Athens.

If a right estimate is to be formed of the work of Monro's life, it must be borne in mind that he constantly devoted himself in a self-sacrificing manner to the service of his University and of his college. He united practical shrewdness and liberal views with rare impartiality, and that is why he was so indispensable in the business affairs of the University.

For twenty years he was on the Hebdomadal Council, for twelve years on the Board of Curators of the University Museum, and for twenty years on the Delegacy of the University Press. For about three years he was pro-Vice-Chancellor, and for three years Vice-Chancellor of the University. In dealings with foreign universities his talent for languages came in very usefully. He spoke German, French, and Italian, and was able on academical occasions to make public speeches in all three languages.

In academical politics Monro belonged distinctly to the party of reform, and must be reckoned as one of its chief leaders. Great value was set upon his opinion, for he was credited with remarkable clearness of vision and saneness of judgement. His manner was, from first to last, unobtrusive, and so it came about that his influence reached further than people suspected. The changes which a Parliamentary Commission in the seventies introduced into the constitution of the University were not all to his mind, but he strongly approved of some of them, and he contributed a good deal towards putting the new regulations into an advantageous and practical shape.

Monro was by nature very quiet and retiring, and on that account, outside the narrow circle of his intimate acquaintance, he passed for a somewhat cold disposition. In reality he was kind-heartedness itself. Those who sought his help never sought it in vain. The undergraduates of his college were fond of him, the college servants adored him, and he was touchingly devoted to children.

The honorary degree of Doctor of Laws was conferred upon him by the University of Glasgow, that of Doctor of Letters by Trinity College, Dublin, and that of Doctor of Civil Law by his own University. From France he received the honorary title of 'Officier de l'Instruction Publique.' He was one of the original Fellows of the British Academy, whose names are the only ones which appear in the foundation charter.

This brief sketch may be closed with an estimate of Monro's Homeric work communicated by Mr. T. W. Allen, who has been already mentioned as his faithful friend and collaborator.

'What distinguished Monro's Homeric work from that of other Englishmen of his generation was, in the first place, his knowledge of Comparative Grammar or Philology. When he began to write on Homer he was almost alone in this possession, and at his death there are few members of his own University who have a first-hand knowledge of Comparative Philology.

'This equipment enabled him, on the one hand, to take account of the results of the comparative method in establishing the Homeric text beyond the period of literary tradition, and thereby preserved him from the one-sided attitude of

so eminent a Homerist as Arthur Ludwich and on the other, it gave him the means to gauge and to resist the eccentricities of the purely linguistic school. Monro, from the first, denied the hypothesis of August Fick, which still in a modified form holds the field on the Continent, namely, that Homer was originally written in the Aeolic dialect, and in his latest work, the Appendix to the *Odyssey*, Books XIII–XXIV, he may be said to have given the deathblow to it He there laid down his own theory of the Homeric language (which he also embodied in a paper read at the Archaeological Congress at Rome in 1903), namely, that it was one of the varieties of the common tongue of pre-Dorian Greece, which accident and the merits of Homer elevated to the position of a literary language. This theory, that of the *illustre volgare*, appears likely to prevail.

'His position in Homeric criticism was defined by tradition on the one hand, and linguistic results on the other He had difficulty in admitting into the text a form recovered to the Greek language by linguistic method unless there was documentary evidence to show that it had once stood in the text, or its disappearance could be easily and clearly accounted for Thus he restored ἧος τῆος τεθνηώς, &c , on the ground that the MS. forms were the result of mechanical mistranscription, but retained metrical irregularities like Αἰόλου, ἀνεψιοῦ, &c , because the forms in -οο are without inscriptional testimony, and cannot be assigned to a definite period. In these matters his method was very much that of Aristarchus, who, so far as we can gather, did not admit a correction into the Vulgate of his day, unless diplomatic authority could be found for it Monro, indeed, in many respects, resembled that most judicious of ancient critics. Besides this he was a great exegete, and had a sure knowledge both of Greek and of Homeric usage His annotations, of which he was sparing, are mostly in this province

'He was in one sense not original Probably he had done little actual collection of material—though it is absurd to call his work, as a recent German critic has done, a "mosaic" From this position—that of estimating and utilizing the statistics of others—he derived two benefits · the absence of intellectual fatigue, which prevents the researcher from weighing and utilizing his own collections, and freedom from prejudice and partiality His judgement indeed was unapproached The motives for liking or dislike were far from him, and from his verdict there is seldom an appeal. Few can have had dealings with him, personal or literary, without feeling that πρότερος γεγόνει καὶ πλείονα ᾔδη '

J. COOK WILSON.

FREDERIC WILLIAM MAITLAND, 1850-1906

FREDERIC WILLIAM MAITLAND, an original member of the British Academy, was born in 1850. He was the son of John Gorham Maitland, of whom he contributed a short notice to the Dictionary of National Biography, and grandson of S. R. Maitland, author of *The Dark Ages*. He went from Eton to Trinity College, Cambridge, and became a scholar of the college and an International Law Scholar on Whewell's foundation. In 1873 he took his degree, having been first in the Moral Sciences Tripos of 1872. Having been called to the Bar at Lincoln's Inn in 1876, he returned to Cambridge in 1884 as Reader of English Law four years later he was elected to the Downing Professorship of the Laws of England, which he held for the rest of his life. In 1886 he married Florence Henrietta, daughter of Herbert Fisher, sometime Vice-Warden of the Stannaries. The children of the marriage were two daughters, both living. In 1899, after a serious illness, Maitland was advised to winter abroad, and thenceforth did so regularly at Grand Canary, save for one visit to Madeira. His health seemed to be slowly improving on the whole, but in December, 1906, he contracted influenza as he was leaving England, and died of supervening pneumonia on the 19th of that month, a few days after his arrival at Las Palmas. He was a corresponding member of the Royal Prussian and Royal Bavarian Academies, an honorary Fellow of Trinity College, Cambridge, and honorary Bencher of Lincoln's Inn; and in the last days of his life the newly established bronze medal of the Harvard Law School was awarded to him.

These are the bare facts necessary to be set down as to one of the most remarkable lives of our time. It is not easy to convey an adequate notion of Maitland's work to those who have not themselves laboured in the same field. It is still less easy for any one to appreciate the difficulties or the success who does not remember the conditions under which he started. Maine, whose activity, belonging to the preceding generation, just overlapped the beginning of Maitland's, had shown that legal ideas and institutions have a true

natural history He had laid out its lines with comprehensive and penetrating insight, and his ideas were bearing fruit in more than one quarter. But he was not specially learned in English law, and, for other reasons I have tried to explain elsewhere, English materials were those of which he could make least use. Looking back some twenty-five years, we see the early history of the Common Law still obscure, insulated, a seeming chaos of technical antiquities Historians excusably shrank from it, and the lawyers who really knew much of it could almost be counted on one's fingers. Some illuminating researches, in the first rank of them certain classical judgements of Sir James Shaw Willes, who died in 1872, lurked in reports which lay students did not even know how to consult. The current explanations accepted in respectable textbooks were constantly superficial and often erroneous Much fable was mixed with the history down to the end of the thirteenth century or later. Men whose very trade was to be satisfied with nothing short of strict accuracy were content to be credulous amateurs about the origins of their own learning. This was the world which Maitland's genius transformed, a genius equipped with sound professional training and adorned with a faculty of exposition which recalled W. K. Clifford's achievements in a quite different sphere.

So complete has the transformation been, that our children will hardly believe how uncritical their grandfathers were, and on what palpable fictions they were nourished. Stubbs had well cleared his own ground, and had built enduring work on it. But he confined himself, in the main, to the political aspect of our institutions in the Middle Ages. With far more patience than Freeman's, and without Freeman's almost perverse repugnance to the legal habit of mind, he still had not the training that would have enabled him to grapple with legal technicalities and to perceive their full significance. Maitland accomplished for mediaeval English law no less than Stubbs had done for our mediaeval constitution, and he showed moreover that the law was an inseparable and intimate part of the whole structure. There is no longer any room in serious English literature for the historian whose law consists of a few ornamental references to Blackstone, and to whom a mediaeval writ is a barbarous puzzle, or the lawyer whose history is a mere sequence of regnal years. There were already those who knew that the bones of law were dry without history, and the tissue of history was invertebrate without law · the touch of prophetic fire was still wanting. Maitland commanded the dry bones to live, and henceforth they are alive. This was not to be done without minute and strenuous labour. It would have been enough for one

man's work to make the preliminary clearance and leave the construction for other hands. But Maitland combined the rigorous method of a specialist with profound insight, sure judgement, and constructive imagination. No one could be more exact or patient in sifting details, but also, whatever pains and ingenuity had been spent on them, no one could better resist the temptation of overprizing the small matters and letting them obscure larger issues. Two great gifts were with him which are not always vouchsafed to critical students, the practical sense of affairs that teaches generalities to know their place, and the saving sense of humour that chokes off paradox. No man was more tolerant of honest mistakes, or more frank in correcting himself.

Enumeration of Maitland's writings would not be profitable here, and indeed it may be some time before a complete list can be made. The principal ones are mentioned by the present writer at the head of an article in the *Quarterly Review* for April, 1907. But no small part of Maitland's work, and some of the best, is contained in papers contributed to many publications, and not confined to technical or learned periodicals. The *English Historical Review* and the *Law Quarterly Review* have the greater shares. It is expected that the bulk of these dispersed articles and criticisms will be collected in book form before long. Of Maitland as a critic it may be said that he never detracted and seldom omitted to add. Many of his friendly hints to younger scholars are surely bearing fruit. Taking his performance as it stands open to the general knowledge of students, almost every one would fix the central point at the *History of English Law before the time of Edward I*[1]; and it so happens that this fits the order of time well enough, for Maitland's conspicuous activity began little more than ten years before 1895, and ended, all too soon, little more than ten years after. More than this, the substance of his production may be regarded, with a few exceptions, as either leading up to a comprehensive view of English law in its great formative period, or as arising out of it.

Pleas of the Crown for the County of Gloucester, a critical edition of an unpublished roll (1884), was the trial piece in which Maitland showed himself a craftsman. In dealing with *Bracton's Note Book* (1887) he gained a wider mastery of his materials, and the tact which is the flower of historical erudition and comes only of real intimacy with the language and thought of a past age. Then came introductions to the Selden Society's volumes, with editing and

[1] With regard to my own share in this book, I think it best to add nothing to the note appended to the preface, which had Maitland's approval.

supervision of the texts, Maitland walked as a familiar friend among the stewards and suitors of manorial and other local courts, the nurseries of custom which the king's judges and counsellors were to shape into the Common Law. In these patient surveys and investigations the foundations of the *History* were laid. No sooner was the *History* written than there branched off from it a series of monographs. Maitland looked backward from Anglo-Norman to Anglo-Saxon land tenures, and the supplementary chapter he had thought of grew into *Domesday Book and Beyond*. He found questions of marriage and legitimacy raising constant boundary disputes between the Common Law and the Canon Law; he crossed the boundary to grapple with canonists and civilians, and the legend of autonomous Anglicanism, a legend which could vouch the authority of Stubbs, evaporated before him. There has been no answer to *Roman Canon Law in the Church of England*. He sought out the origins of communal administration and corporate life, again he adventured himself beyond our insular learning, and came back a convinced adherent of Gierke's 'realist' doctrine—the doctrine that a corporation is not a fiction but a real person—and its first champion in this country. The lectures on *Township and Borough*, the brilliant introduction to *Political Theories of the Middle Age*, and the essay on Trust and Corporation, written for translation into German and not yet published in the original English, were the result of this excursion, besides the rewriting of a section in the *History* itself. Looking forward, again, from the thirteenth century, Maitland perceived, not the first indeed, but more fully than any one had yet done, the need for critical treatment of the Year Books, the reports, or rather notes, on which we have to rely for knowledge of what the king's courts were doing from term to term. The old printed text is careless and corrupt, in some parts exceedingly corrupt. Maitland, guiding the work of the Selden Society, took the earliest in date of the seventeenth-century folios, the Year Book of Edward II, which is also the worst, and in the last years of his life produced three volumes of a model edition. Collation of MSS. and the court rolls was not enough for him. The language is a specialized form of Anglo-French, so technical as to be quite obscure to any mediaevalist who is not also an English lawyer, and not without dialectic peculiarities. Maitland expounded its grammar and orthography in pages which commanded the admiration of no less a master in this kind than M. Paul Meyer; a feat which appears the more remarkable when one knows that classical scholarship had formerly no attractions for him, and he took no particular interest in philology

for its own sake. Yet another problem remained when the textual and linguistic difficulties had been overcome. What were these Year Books, after all? We were brought up to believe them official reports, on the strength of what seemed a respectable professional tradition. Bacon and Coke, seldom unanimous, had agreed in this. Plowden had spoken of a golden age when there were grave and learned reporters, chosen servants of the king, preserving the wisdom of his judges. It is true he does not name the Year Books, and I now think his golden age lay in a mythical epoch which he could not have dated and did not intend to date But we had all, or almost all, accepted the story as good enough, at least, for pious opinion. There were indeed sundry notes of suspicion. Hammond, the American editor of Blackstone, raised a warning voice many years ago. Mr. Pike, on closer inquiry, had expressed like doubt with more circumstantial reasons. Maitland fairly ran the legend to earth and slew it in its lair. The grave and learned men vanish under his hands, and become young apprentices making up their note-books, eager, critical of legal points and careless of immaterial names and facts, catching the flying humours of rapid oral pleading, and well pleased to mark an apposite judicial quip; doing better for us on the whole, may be, than the imaginary officials would have done. It was the formally digested commonplace books and the printed abridgements, it would seem, that killed the Year Books just before Plowden's time. Iconoclasts are many, but there are few who, like Maitland, break down only to build something better. The full history of English law in the fourteenth and fifteenth centuries will hardly be written in our time; but the historian who is to come will find everything prepared by Maitland for taking up the work where Maitland left off When he arrives at the sixteenth century, he will find Maitland beforehand with him in the *Cambridge Modern History* and in the Rede Lecture on English Law and the Renaissance, a discourse addressed to an academic but not professional audience, and adapted to that special purpose with admirable felicity.

The literary skill and charm of Maitland's writing can be appreciated only through familiarity. Readers of S R. Maitland's *The Dark Ages*, a book that still deserves to be read, will easily see that the strain of humour was ancestral. In the grandson it was fuller, bolder, more various, abounding in delightful surprises, overflowing even into the titles of learned papers, breaking out in footnotes with rapid allusive touches. Thus it came to pass that Maitland was not only a great expounder but a most effective controversialist. It was good to have him on one's side, for he was sure to say something

that made its mark. His last published book, as it fell out, was pure literature, a labour of love, but executed under great difficulties, which led him to feel almost despondent about it. Maitland lived just long enough to be assured that *The Life and Letters of Leslie Stephen* was a thoroughly successful performance instead of being, as he had feared, a failure. Those whose interests are remote from his professional writings may learn something of his quality here. The witness of American, French, German, Austrian, and Italian scholars may be found in the *Law Quarterly Review* for April, 1907.

It must always be doubtful whether a lifelong friend and fellow worker is the right person to set down a brief memorial of this kind, and most doubtful to the friend himself. Of such an one it cannot be said *securus iudicat*; the world's final judgement is certain in the long run because it is impartial. Still, if the world judges more surely, the friend knows more than the world, and more than he can tell.

FREDERICK POLLOCK.

APPENDIX

UNIVERSITATI ABERDONENSI

ACADEMIA LITTERARUM BRITANNICA SALUTEM.

Vobis, Viri Doctissimi, gratias agimus atque habemus maximas quod ferias saeculares instauraturi gaudii nos vestri participes esse voluistis. Itaque unum e sociis nostris libenter ad vos mittimus qui votorum nostrorum interpres sit, Henricum Pelham, Collegii S.S. Trinitatis Praesidem, Historiae Antiquae Professorem apud Oxonienses

Quattuor saeculorum memoriam recolentes Academiam vestram intuemur cum universa civitate paullatim crescentem et civium vitae tam mire consentientem ut in iis quae in Scotia aut publice gesta sint aut mente suscepta momentum haud leve ipsa habuerit. Propria etiam quaedam vobis per rerum vicissitudines permansit indoles. Cui non nota est Aberdonensium virtus illa pertinax, ingenium robustum idemque subtile, tam in agendo quam in cogitando strenuum? Huius ingenii nutrix fuit ex quo primum condita est Academia, quae discipulos nacta ex finitimis praesertim regionibus collectos, suapte natura adulescentes discendi semper aliquid atque addiscendi cupidos, victu parcos et severos, laboribus adsuetos, forti ac virili disciplina ita instituit ut pariter reipublicae pariter litteris ac scientiis operam navarent. Exstiterunt multi optimarum artium vindices vel veri indagatores, quorum paucos commemorare libet in suo quemque genere praeclaros, in historia et antiquitatis cognitione Boece, Leslie, Burnet, Chalmers, Hill Burton, in re grammatica Ruddiman; in litteris humanioribus Arthurum Johnston, Arbuthnot, Beattie, in philosophia Reid, Bain, in theologia Robertson Smith, in fabulis scribendis Smollett; in scientiis Gregorios quasi iure quodam avito famam quemque consecutos et nostrae denique aetatis virum eximium Clerk Maxwell

Quod si sero in Universitatem unam coaluerunt duo vestra Collegia, Regium atque Mariscallanum, et doctrinae tanquam flumina, divisa olim, miscuerunt, inde usque largiores haustus discipulis suis suppetunt et ad ceterorum magis fructum redundant Hodierno igitur die Universitati Aberdonensi civium benevolentia munitae, amore alumnorum et veneratione ditatae, novo iam scholarum adparatu auctae salutem incolumitatem prosperitatem exoptare licet atque ominari.

Datum Londini Kal Sept MDCCCCVI